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Social, Economic and Cultural Overview of Western Newfoundland and Southern Labrador

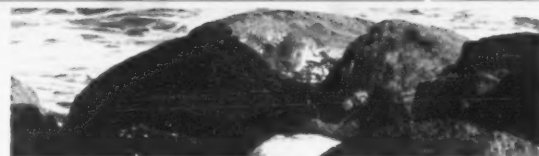


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Social, Economic and Cultural Overview of
Western Newfoundland and Southern Labrador

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Executive Summary

This report provides an overview of the major social, economic, and cultural activities in the western Newfoundland and southern Labrador portion of the Gulf of St. Lawrence Large Ocean Management Area (LOMA). The aim is to address parameters that are relevant for integrated coastal and oceans management. This work was commissioned by Fisheries and Oceans Canada (DFO), Oceans and Habitat Management Branch, towards the development of a social, economic, and cultural overview and assessment report for the Gulf of St. Lawrence Integrated Management (GOSLIM) initiative.

Section 1.0 describes the purpose of the report, study area (referred to as the western Newfoundland and southern Labrador region), methodology, and information sources. The geographic limits of the western Newfoundland and southern Labrador region are defined as Cape Ray in southwestern Newfoundland to Cape Bauld on the tip of the Great Northern Peninsula, and southern Labrador from L'Anse au Clair on the Quebec border north and east to Cape St. Charles, Labrador. The western Newfoundland and southern Labrador region has been sub-divided into four coastal areas that roughly coincide with the geographic limits of four locally defined coastal planning areas (Bay St. George/Port au Port, Bay of Islands, Great Northern Peninsula, and Southern Labrador) and with census subdivision boundaries. Available social, economic, and cultural overview information is grouped according to these four coastal areas wherever possible.

Section 2.0 addresses the social features and activities of the western Newfoundland and southern Labrador region. The demographic profile reveals a declining population and an elevated unemployment rate. The 2006 census by Statistics Canada lists the total population for the western Newfoundland and southern Labrador region as 63,717. Of the 57 census subdivisions in the region, 45 have populations of less than 1,000. Only two communities—Corner Brook and Stephenville—contain populations in excess of 5,000. Between 1996 and 2006, the population of the western Newfoundland and southern Labrador region declined 12%, as compared to a decline of approximately 8% for the Province.

Population declines were less severe between 2001 and 2006, when the population of the region declined approximately 3%, as compared to a decline of less than 2% for Newfoundland and Labrador. During that same time period, four census subdivisions and six communities experienced positive growth rates, the greatest of which were Massey Drive (52%), a residential area just outside of Corner Brook, and Division 9, Subdivision A (231%), which includes Wiltondale, Lomond, and Green Point in the vicinity of Gros Morne National Park. The total Aboriginal population, particularly the portion represented by Métis peoples, increased substantially between 2001 and 2006.

Section 3.0 presents the economic features and activities. The unemployment rate in 2006 of 24% for the entire region was more than three times the Canadian average. Unemployment rates exceeded 30% for each of the Great Northern Peninsula and Southern Labrador coastal areas. By contrast, the unemployment rate for the Bay of Islands remained lower than the provincial average during all census years, 1996-2006. In 2001, which was the most recent year for which data were available, a higher proportion of people in the region were employed in primary industries such as fisheries and forestry than were those in the Province as a whole. Economic activity in the region has been influenced in general by federal and provincial investment.

Ten different industrial activities are described, including commercial fishing and sealing, oil and gas, mining, forestry, and tourism. Recreational activities are treated separately. Commercial fisheries remain the most important economic base for many of the small communities of the western Newfoundland and southern Labrador region. The number of active fishers for the entire region remained relatively stable between 2000 and 2007. Although the number of groundfish licence holders declined following an adjustment in 2001 due to the cod moratorium, their numbers have remained relatively stable since then.

Landed weight and value for six categories of fisheries, including seals, are summarized for the western Newfoundland and southern Labrador region and for the four coastal areas during the period 2000-2007. For the region as a whole, pelagics represented the greatest amount of landed weight among all categories of fisheries and were especially strong between 2003 and 2007. Crustaceans represented the greatest amount of landed value to the region and were especially strong in both landed weight and value along the Great Northern Peninsula. For the coastal areas, the Great Northern Peninsula had the highest proportion of total overall landed weight for all categories of fisheries combined, including the highest weights for crustaceans, groundfish, molluscs, and miscellaneous. Landed weight for pelagics was highest in the Bay of Islands, followed by Bay St. George/Port au Port. The Great Northern Peninsula also had the highest proportion of total overall landed value for all categories of fisheries combined, including the highest values for crustaceans, groundfish, molluscs, miscellaneous, and seals. Landed value for pelagics was highest in the Bay of Islands, followed by Bay St. George/Port au Port. In the sealing industry, soaring prices for seal pelts in 2006 resulted in a very good year, which was followed by severe declines in the price of pelts in 2007 and 2008.

In other industries, newsprint shipments declined due to continued weakness in North American newsprint markets and further operational reductions at the Corner Brook Pulp and Paper mill. Mining of minerals in the western Newfoundland and southern Labrador region continued to increase as did the exploration of oil and gas off western Newfoundland. The Deer Lake Airport

experienced a record-setting 18% increase in passenger use in 2007, surpassing all other airports in the Province. Although the tourism industry in the region experienced minor declines in visitation between 2006 and 2008, the annual roofed accommodation occupancy rate increased slightly. The cruise ship industry reported increases in the number of port calls in the western Newfoundland and southern Labrador region between 2006 and 2008, although there were declines in the overall number of passengers and estimated value to the region in 2008. Corner Brook experienced an exceptionally good year in 2007, with more than 30,000 passengers and crew visiting, bringing an estimated value of nearly \$1.5 million to the community. Tourism in the region depends heavily on markets from Ontario and the United States, both of which are predicted to be negatively affected in 2009 by the global economic recession.

Section 4.0 presents the cultural features and activities of the western Newfoundland and southern Labrador region, paying particular attention to an accelerating interest in Aboriginal life and in preserving both the tangible environment and the rich diversity of human history. The region offers strong scenic qualities, varied parks and ecological areas, and well-known cultural heritage sites. There is growing participation among government agencies, municipalities, nonprofit organizations, and stakeholder groups in the stewardship of ecological areas, threatened and endangered species, and cultural heritage. This uptake of interest offers great opportunity for the implementation of integrated coastal and oceans management.

A brief Synopsis forms Section 5.0. Preceding the report's text is a list of 93 Tables of data and a list of 25 Figures. Following the report's text is a list of References and six groups of Appendices.

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Preface

This publication is part of a multi-volume assessment of the social, economic and cultural features of the Gulf of St. Lawrence Large Ocean Management Area. Responsibility for Oceans Management is shared among three DFO administrative Regions (Quebec, Gulf, and Newfoundland and Labrador). Each of these regions prepared their own social, economic and cultural assessments, while a synopsis of all three assessments was also completed. These publications were published in both English and French. They have all been prepared as separate volumes in this series.

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

Canada's *Oceans Act* provides a framework for current and future coastal and ocean management initiatives using the approach of Integrated Management (*Oceans Act* 1996). Integrated Management is an ecosystem-based approach to coastal and ocean management that brings together environmental, social, economic, and cultural considerations (DFO 2002). The Oceans Action Plan (DFO 2005a) defines it as a comprehensive way of planning and managing human activities such that they do not conflict with one another and that all factors are considered for the conservation and sustainable use of marine resources and the shared use of oceans spaces.

The Government of Canada has identified five priority Large Ocean Management Areas (LOMAs) as the primary focus for the development and implementation of Integrated Management plans. The Gulf of St. Lawrence is one of these priority LOMAs and encompasses the entire Gulf of St. Lawrence and its Estuary, including coastal areas of five provinces and several First Nations groups. The northeastern portion of the LOMA includes the western Newfoundland and southern Labrador coastal and marine area.

To implement integrated management effectively, the Gulf of St. Lawrence Integrated Management (GOSLIM) initiative will require baseline information on a wide range of social, economic, and cultural features as well as human activities. This information will be combined with existing ecological data in order to form a comprehensive overview of the Gulf of St. Lawrence Large Ocean Management Area.

The purpose of this report is to present pertinent existing information about the major social, economic, and cultural features of the western Newfoundland and southern Labrador portion of the LOMA including significant human activities. The report does not include an assessment of impacts associated with those features or activities.

Social, economic, and cultural features and descriptions of human activities are based on available information from government publications and unpublished data updates, scientific literature, technical reports, planning documents, and the world-wide-web.

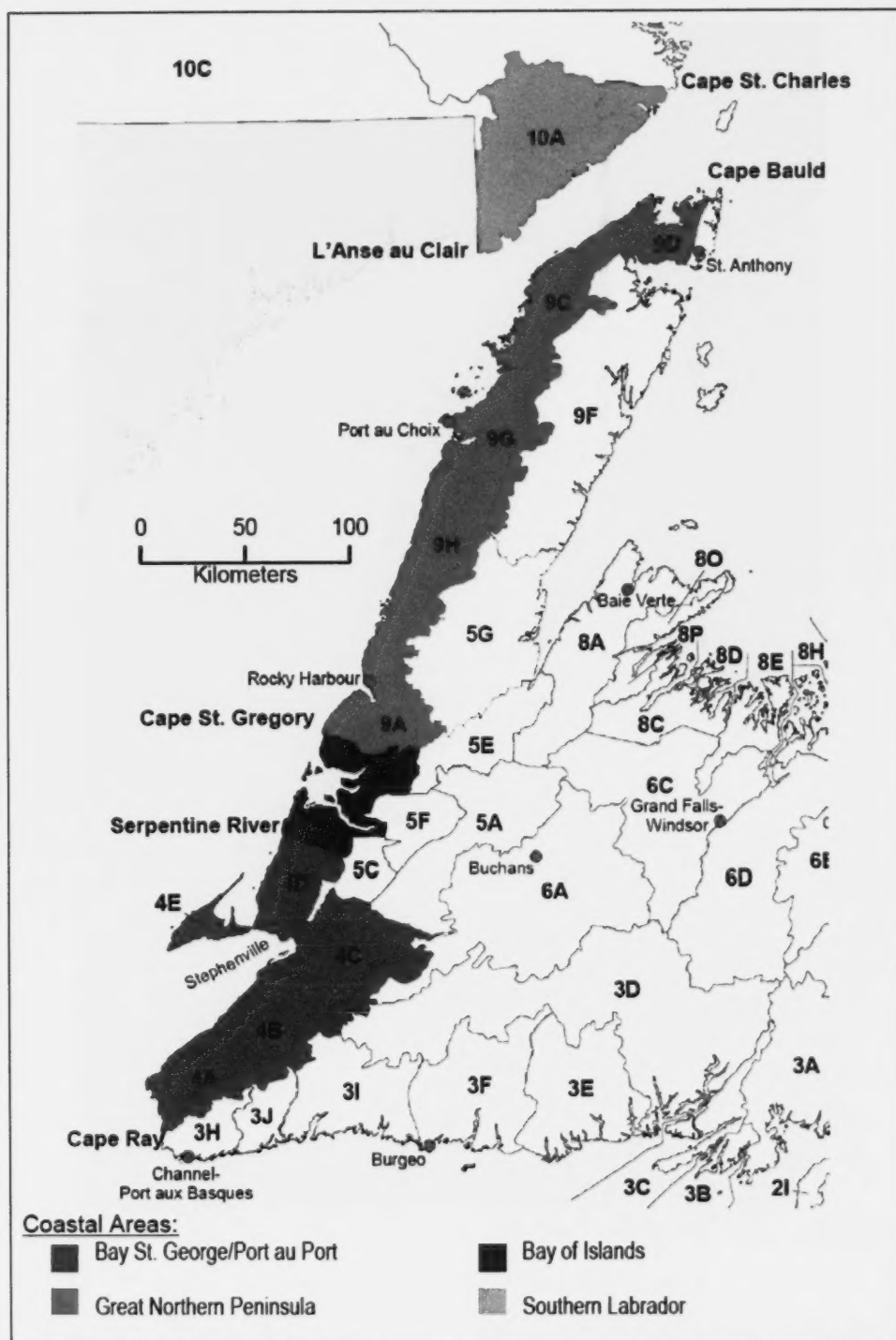
The information contained in this report is intended for use primarily by Fisheries and Oceans Canada (DFO) as lead agency in the GOSLIM initiative. Working in consultation with other government agencies, industry, and stakeholder groups, DFO will use these data for determining appropriate indicators, setting operational objectives, and planning action strategies. Information from this document and others will be combined to produce an overview and planning document suitable for use by stakeholders engaged in planning and informed decision-making about integrated coastal zone and ocean management.

1.2 STUDY AREA

The western Newfoundland and southern Labrador portion of the Gulf of St. Lawrence LOMA is a coastal region extending approximately 500km northwards from Cape Ray in southwest Newfoundland to Cape Bauld on the tip of the Great Northern Peninsula, and from L'Anse au Clair, Labrador near the Quebec border, extending north and east to Cape St. Charles, north of Red Bay, Labrador (Figure 2). For the purposes of this report, the study area is referred to as the western Newfoundland and southern Labrador region.

The marine portion of the region is coterminous with Northwest Atlantic Fisheries Organization (NAFO) Division 4R. The southern boundary of the region at Cape Ray (Figure 1) and the northern boundary comprised of Cape Bauld, the Quebec border, and Cape St. Charles are identical to those of NAFO Division 4R.





Base Map Source: Department of Finance, Newfoundland and Labrador Statistics Agency

Figure 2. The western Newfoundland and southern Labrador region, showing four coastal areas and 13 census consolidated subdivisions.

The region is characterized by small coastal communities, most of which are populated by fewer than 1,000 residents. Only Corner Brook and Stephenville have populations in excess of 5,000.

The western Newfoundland and southern Labrador region is sub-divided to coincide roughly with the geographic limits of four locally defined coastal areas (Table 1) identified by multi-sector coastal management and planning groups (BAE-Newplan 2007b) and with 13 census subdivision boundaries established by Statistics Canada (Figure 2). The exception is the northern boundary of the Bay St. George/Port au Port coastal area (Serpentine River), which occurs just north of the southern boundary for Census Subdivision 5D, but because there are no communities between the two boundaries, there should be no overlap of socio-economic information presented. All municipalities and local service districts of the region are captured entirely within census subdivision boundaries.

Table 1. Coastal areas of western Newfoundland and southern Labrador and their geographic limits.

Coastal Area	Geographic Limits
Bay St. George/Port au Port	Cape Ray to Serpentine River
Bay of Islands	Serpentine River to Cape St. Gregory
Great Northern Peninsula	Cape St. Gregory to Cape Bauld
Southern Labrador	L'Anse au Clair to Cape St. Charles

Statistics Canada defines a census division as a group of neighbouring municipalities, regional districts, or equivalent areas for statistical reporting purposes. A census division is an intermediate geographic area between the levels of province and subdivision. A census subdivision is third level of geographic territory, roughly equivalent to a municipality, for statistical reporting purposes. The Province of Newfoundland and Labrador uses the term "Subdivision of Unorganized" for unorganized geographic areas created by Statistics Canada as subdivisions (Statistics Canada 2009). Census divisions in Figure 2 are composed of all the subdivisions that begin with the same number. The western Newfoundland and southern Labrador region consists of one complete census division (4) and portions of three others (5, 9, and 10). There are 57 census subdivisions within the region, of which 13 appear in Figure 1. The remaining census subdivisions consist generally of municipalities (Figure 1).

1.3 METHODOLOGY

The document provides a broad-based overview of existing information pertaining to social, economic, and cultural features and human activities of the western Newfoundland and southern Labrador region that are relevant to GOSLIM.

Wherever possible, data were organized according to the geographic limits of the four coastal areas and only when necessary was information presented according to other geographic categories, such as Regional Economic Development Zones, due to

unavailable or insufficient data at the census subdivision or community scales. Information is also presented pertaining to significant influencing factors originating outside of the region, such as traffic trends at Deer Lake Airport and the Marine Atlantic ferry crossing.

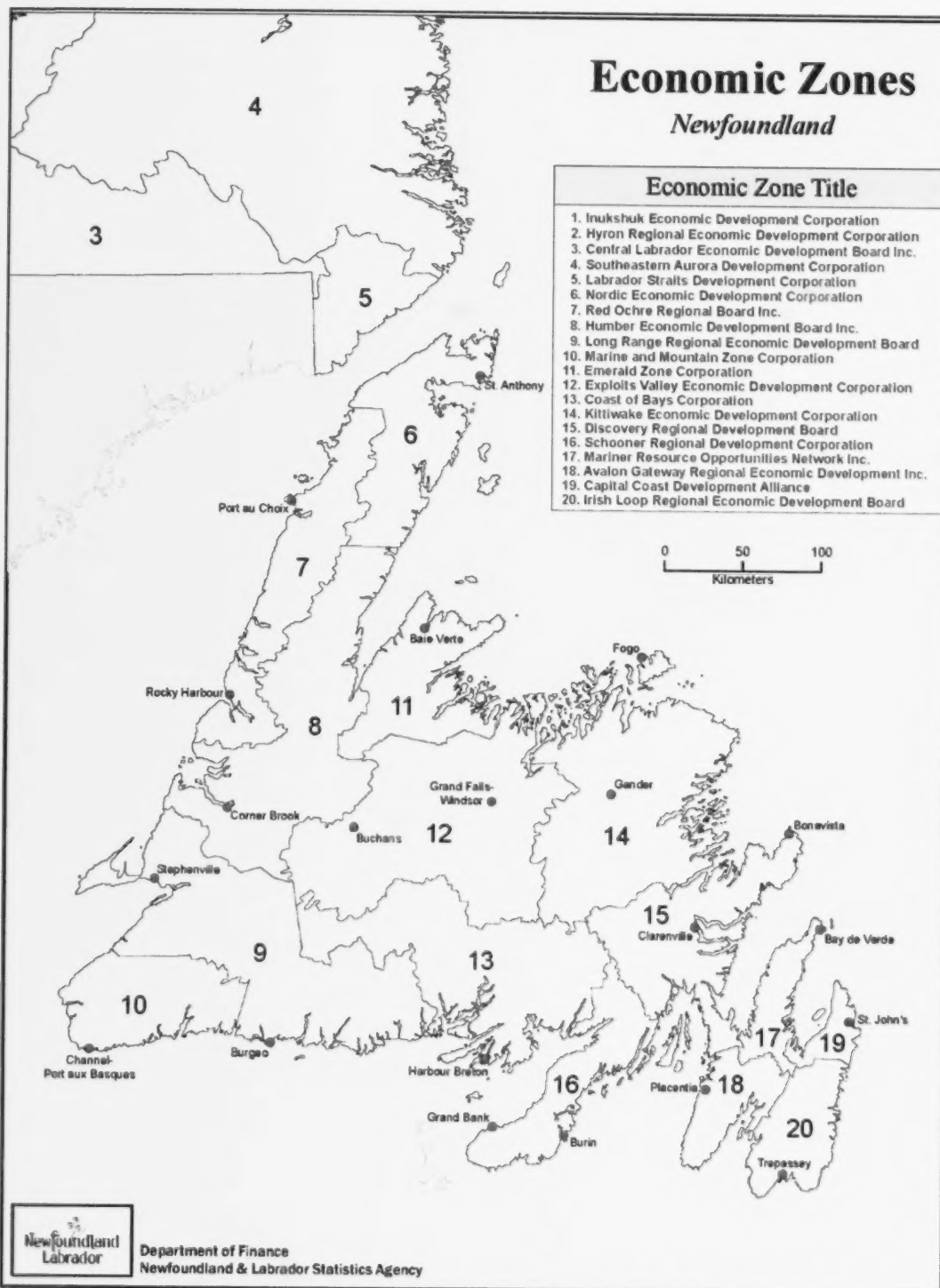
The report organizes topical information according to the three general features: social, economic, and cultural. Section 2.0 on Social Features includes information on governance and the trends in regionalization that help communities to address their needs. Section 3.0 on Economic Features includes information on employment as well as industrial and recreational activities. Section 4.0 on Cultural Features includes information about protection and stewardship of natural and cultural assets. Aboriginal culture is included as an aspect of growing importance to the western Newfoundland and southern Labrador region.

1.4 SOURCES OF INFORMATION

Information contained in this report is based on available data from many sources. Sources include: 1) databases available on the web sites of Statistics Canada and the Government of Newfoundland and Labrador Statistics Agency, plus the Community Information Database (<http://www.cid-bdc.ca/>) organized by Agriculture and Agri-Foods Canada, and the information database of Newfoundland and Labrador known as Community Accounts (<http://www.communityaccounts.ca/communityaccounts/online/getdata.asp>); 2) literature reviews of governmental reports, scientific papers, strategic plans, annual reports by industry, and various documents by the Regional Economic Development (RED) Corporations and Rural Secretariat; and 3) personal meetings, telephone, and email contacts with subject area experts ranging from scientists and resource managers to economic development officers, tourism experts, industry representatives, and municipal authorities. When combined, these sources represent a wide range of expertise concerning the social, economic, and cultural features and activities of the western Newfoundland and southern Labrador region.

The majority of statistical data within this report comes from Statistics Canada, Community Information Database, Community Accounts, and the Newfoundland and Labrador Statistics Agency. The original source of data from the Community Information Database is Statistics Canada. Both Community Accounts and the Newfoundland and Labrador Statistics Agency rely on Statistics Canada for the majority of their data but in certain instances they draw from other sources.

Data reported at the level of census subdivision by Statistics Canada provided a good match for the geographic boundaries selected for the four coastal areas. In instances where the information being sought was not available at Statistics Canada, the Community Information Database or Community Accounts were consulted, in that order. Only where necessary are data presented according to Regional Economic Development Zones (Figure 3). This is because the borders of the RED Zones do not align exactly with the



Source: Department of Finance, Newfoundland and Labrador Statistics Agency.

Figure 3. Regional Economic Development Zones of Newfoundland and Labrador.

coastal areas. A notation is provided in cases where this occurs. In addition, some of the information obtained from industry sectors such as fisheries and forestry is grouped according to that sector's commonly accepted areas or districts, as it was not available by coastal area.

Not all data from the 2006 Census that had been released by Statistics Canada at the time of this study were available at the level of subdivision. Some data on the Community Information Database and on Community Accounts were available through 2001 only. These limitations are noted where appropriate.

2.0 SOCIAL FEATURES AND ACTIVITIES

2.1 INTRODUCTION

Social variables are presented as baseline information for the western Newfoundland and southern Labrador region. Demographic information concerning population size, distribution, and density, along with migration and labour market changes provide indicators of population status from which future comparisons may be made. Other parameters such as education and health provide indicators of the well-being of the region's citizens and their preparedness for addressing future needs. Governance is addressed in the traditional sense of governmental, industry, Aboriginal, and nonprofit organizations. In addition, examples are provided of the trend in regionalization that is occurring for certain services previously managed on a municipal or local scale.

2.2 DEMOGRAPHIC PROFILE

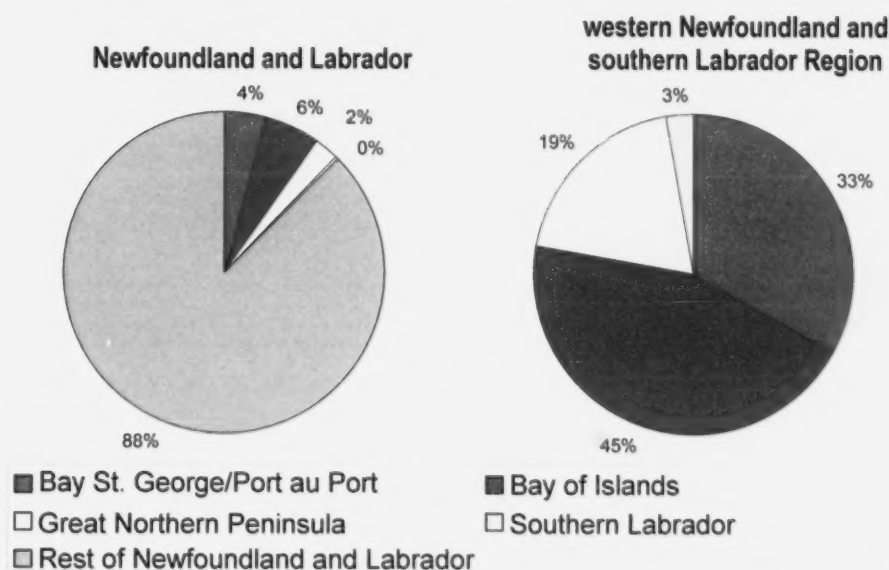
2.2.1 Population size, distribution, and density

The total population for the western Newfoundland and southern Labrador region from Cape Ray to Cape Bauld and for Southern Labrador is 63,717 (Table 2). This represents 12.6 % of the total population for Newfoundland and Labrador (Table 2, ; Figure 4). Only two communities contain populations in excess of 5,000: 1) the City of Corner Brook (pop. 20,083) and 2) the Town of Stephenville (pop. 6,588). Appendices A-2 to A-5 list the populations of major communities in each coastal area.

The coastal area with the largest population and highest population density is Bay of Islands, most of which is represented by Corner Brook (Table 2, Figure 4). The coastal area with the smallest population and lowest density is Southern Labrador (Table 2). Population density is based on land area determined as the sum of all census subdivision land areas within each coastal area (Statistics Canada 2006 Census).

The population of the four coastal areas declined an average of 12.0% between 1996 and 2006, compared with an 8.4% decline for Newfoundland and Labrador as a whole (Appendices A-2 to A-5). The Bay of Islands coastal area is the only coastal area to experience even a slight increase in population (.96%) from 2001 to 2006 (Table 2; Appendix A-1).

Population data for the individual communities and census subdivisions within each coastal area are presented in Appendices A-2 to A-5. The only communities and census subdivisions to experience population increases from 2001 to 2006 are Census Division 4, Subdivisions A and D (Bay St. George/Port au Port); Massey Drive, Humber Arm South, Hughes Brook, and Mount Moriah (Bay of Islands); Census Division 9, Subdivision A, Sally's Cove, and Bellburns (Great Northern Peninsula); and Census Division 10, Subdivision A (Southern Labrador). The areas with the highest percent increase in population from 2001 to 2006 are Massey Drive (52.0%), a municipality just outside of Corner Brook, and Division 9, Subdivision A (230.8%), which includes Wiltondale, Lomond, and Green Point in the vicinity of Gros Morne National Park.



Source: Statistics Canada 2008a.

Figure 4. Proportion of the Province of Newfoundland and Labrador and western Newfoundland and southern Labrador region population represented by each of the four coastal areas, 2006.

Table 2. Total population and population density for western Newfoundland and southern Labrador coastal areas, 1996 – 2006.

Coastal Area	Land Area (km ²)	Population Density 2006 (per km ²)	Total Population			Percent Change 1996-2006
			2006	2001	1996	
Bay St. George/Port au Port	7,081.8	3.0	21,114	22,096	24,595	-14.2
Bay of Islands	1,624.2	17.6	28,518	28,248	30,611	-6.8
Great Northern Peninsula	7,037.1	1.7	12,268	13,331	15,096	-18.7
Southern Labrador	3,841.7	0.5	1,817	1,996	2,077	-12.5
Total Region	19,584.8	3.25	63,717	65,671	72,379	-12.0
% of NL	5.3		12.6	12.8	13.1	
Newfoundland and Labrador	370,494.9	1.36	505,469	512,930	5,51,792	-8.4
Canada	9,017,698.9	3.51	31,612,897	30,007,094	28,846,761	9.6

Source: Statistics Canada, Census 2001 - 2006.

Preliminary figures from Statistics Canada for the fourth quarter of 2007 show a 12% increase in population in Newfoundland and Labrador. This is the second consecutive quarter of growth after declines lasting several quarters. The Province also had the second highest inter-provincial in-migration rate in Canada (Statistics Canada News Release 2008). It is unclear what if any effect this recent trend may be having on western Newfoundland and southern Labrador.

2.2.2 Aboriginal population

The total Aboriginal population for the western Newfoundland and southern Labrador region including all categories of Aboriginal peoples is 7,340 (Table 3). This represents 31.3% of the total Aboriginal population for Newfoundland and Labrador (Table 3, Figure 5). The highest proportion of Aboriginal peoples residing in the region is represented by North American Indian (status and non-status), followed by Métis and Inuit. The coastal area with the largest Aboriginal population is Bay St. George/Port au Port, most of which is represented by North American Indian. The coastal area with the smallest Aboriginal population is Southern Labrador, which is represented by Métis. The population of Métis in the Southern Labrador area is likely represented by Inuit-Métis, which are defined as having common ancestry with the Inuit of Labrador. It is possible that Innu-Métis also reside in the region, but the population data available from Statistics Canada did not provide this level of detail.

The Aboriginal population for the western Newfoundland and southern Labrador region, including all categories of Aboriginal peoples except Inuit, increased between 2001 and 2006 (Table 3). Data from Statistics Canada were available to 2006, which does not take into consideration newly registered members of the six bands represented by the Federation of Newfoundland Indians (FNI) and three other bands that are not members of the FNI (see Section 4.2 for cultural information on Aboriginal peoples).

The increase in the Métis population for Bay St. George/Port au Port Peninsula during the ten year period 1996 – 2006 might be attributable in part to category shift, though this could not be confirmed. For example, certain residents, who in 2001 considered themselves to be of non-Aboriginal background, in 2006 may have converted to the category of Métis as a result of increased awareness of Aboriginal heritage and interest in tracing family origins and personal ancestry. The North American Indian population for Bay St. George/Port au Port Peninsula also increased during those same years.

Table 3. Aboriginal population for western Newfoundland and southern Labrador coastal areas, 1996 – 2006.

Coastal Area	Total	North American Indian	Métis	Inuit	Multiple Aboriginal
2006					
Bay St. George/Port au Port	4,380	1,690	340	45	20
Bay of Islands	1,940	1,040	300	10	25
Great Northern Peninsula	670	165	195	40	30
Southern Labrador	350	0	340	10	0
Total Region	7,340	2,895	1,175	105	75
% of NL	31.3	37.3	18.2	2.2	25.9
Newfoundland and Labrador	23,455	7,765	6,470	4,715	290
Canada	1,172,785	698,025	389,785	50,480	7,740
2001					
Bay St. George/Port au Port	2,175	1,475	170	20	0
Bay of Islands	1,375	945	55	55	10
Great Northern Peninsula	560	315	70	75	0
Southern Labrador	150	0	130	20	0
Total Region	4,260	2,735	425	170	10
% of NL	22.7	38.9	7.8	3.7	5.3
Newfoundland and Labrador	18,775	7,040	5,480	4,555	190
Canada	976,310	608,855	292,305	45,075	6,665
1996					
Bay St. George/Port au Port	805	515	0	0	10
Bay of Islands	880	530	110	35	15
Great Northern Peninsula	405	125	155	25	10
Southern Labrador	135	0	130	10	0
Total Region	2,225	1,170	395	70	35
% of NL	15.7	26.9	8.7	1.7	20.0
Newfoundland and Labrador	14,200	4,355	4,555	4,125	175
Canada	799,010	529,035	204,120	40,225	6,415

Source: Community Information Database 2009.

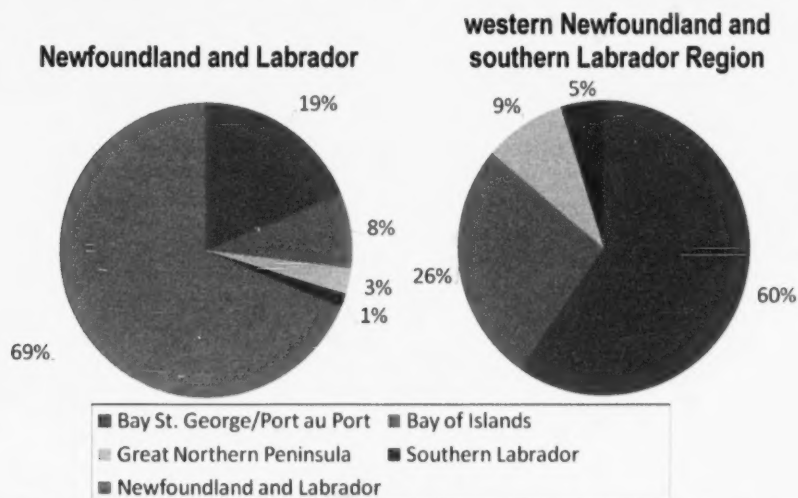


Figure 5. Proportion of the Newfoundland and Labrador and the western Newfoundland and southern Labrador region Aboriginal population represented by the four coastal areas, 2006.

2.2.3 Migration pattern

Inter-provincial migration data for census divisions containing the coastal areas show an increase in both in-migration and out-migration for 2006-2007 as compared to 2005-2006 (Table 4). The overall result, with the possible exception of Labrador, is a slowed negative net migration. It is not possible to separate out the Southern Labrador coastal area because available information from Statistics Canada covered all of Labrador. In addition, it is not known what effect larger towns just outside the boundaries of the other three coastal areas may have on migration values within the coastal area.

Table 4. Annual number of inter-provincial migrants by census division, 2005-2006 and 2006 – 2007.

Census Division No. and Name		2006-2007			2005-2006		
		In	Out	Net	In	Out	Net
Div. No. 4	St. George's	750	1,025	-275	534	814	-280
Div. No. 5	Humber District	1,246	1,325	-79	847	1,070	-223
Div. No. 9	Northern Peninsula	443	712	-269	267	637	-370
Div. No. 10	Labrador	582	907	-325	417	698	-281

Source: Statistics Canada, Demography Division, February 7, 2008.

Inter-provincial migration data for the period 2001 to 2007 show a constant negative net migration, although the amount has fluctuated from year to year (Table 5).

Table 5. Net annual inter-provincial migration by census division, 2001 – 2007.

Census Division Name		2006-2007	2005-2006	2004-2005	2003-2004	2002-2003	2001-2002
Div. No. 4	St. George's	-275	-280	-237	-200	-219	-177
Div. No. 5	Humber District	-79	-223	-47	-72	-51	-383
Div. No. 9	Northern Peninsula	-269	-370	-142	-153	-169	-245
Div. No. 10	Labrador	-325	-281	-266	-261	-326	-436

Source: Statistics Canada, Demography Division, February 7, 2008.

In 2006, Alberta was the province that had received the greatest number of migrants who in 2001 had been living within census divisions of western Newfoundland and Labrador. This was followed by Ontario and then Nova Scotia. The Avalon Peninsula received the greatest number of intra-provincial migrants during that same time period (Table 6). It has been suggested that many returnees return to the Avalon Peninsula, specifically to St. John's, rather than to the more rural areas such as western Newfoundland and southern Labrador. This could, in part, be because they are seeking jobs that are more comparable to those they held while living in other provinces. The higher rate of population decline for the western Newfoundland and southern Labrador region, as compared to the Province as a whole, might be attributed in part to lower attraction and retention rates for immigrants and returning residents, as well as higher levels of net out-migration.

Table 6. Census division of residence five years ago, for the population five years of age and over, 2006.

Current Residence	NL Census Division of Residence 5 Years Ago				
	Division No. 4 (SW Nfld)	Division No. 5 (Humber/White)	Division No. 9 (Northern P.)	Division No. 10 (Labrador)	Total WNSL Region
Within Newfoundland and Labrador					
Avalon Peninsula	295	725	200	1,060	2,280
Burin Peninsula	25	10	0	10	45
South Coast	70	35	40	10	155
Central	45	175	40	155	415
Bonavista / Trinity	0	45	30	80	155
Notre Dame Bay	15	85	75	135	310
Outside of Newfoundland and Labrador					
Prince Edward Island	55	80	60	25	220
Nova Scotia	410	355	130	220	1,115
New Brunswick	55	110	30	160	355
Quebec	45	40	10	170	265
Ontario	435	680	285	295	1,695
Manitoba	25	15	15	20	75
Saskatchewan	0	10	30	25	65
Alberta	575	945	405	375	2,300
British Columbia	90	245	50	70	455
Yukon	0	0	0	0	0
Northwest Territories	45	80	25	10	160
Nunavut	10	40	25	30	105
Total Migration	2,525	4,035	1,945	3,255	11,760

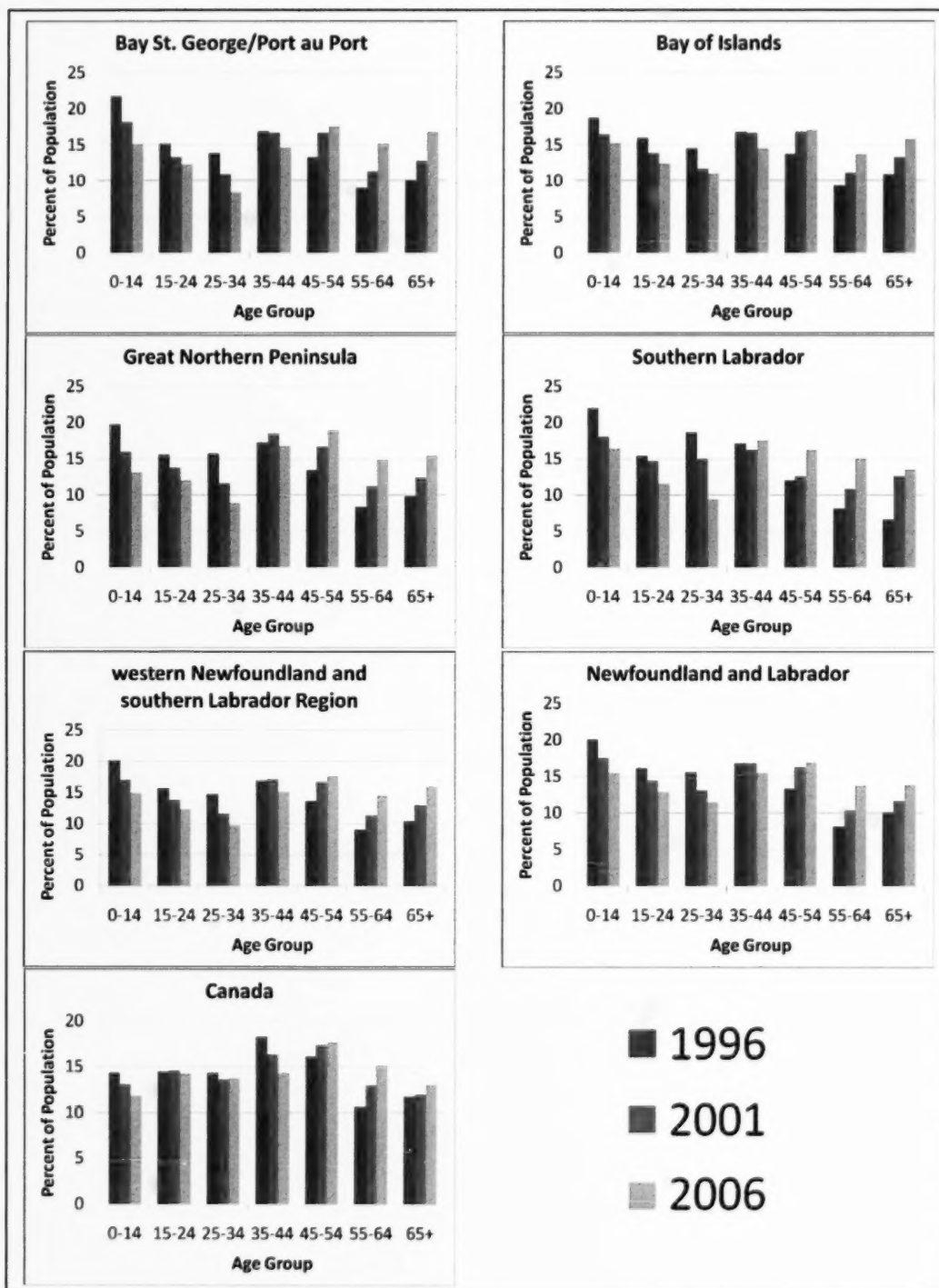
Note: WNSL=western Newfoundland and southern Labrador.

Source: Dawn Jordan, Manager, Data Dissemination Unit, Newfoundland and Labrador Statistics Agency, St. John's, NL, 2008.

The decline in employment opportunities within the fishing industry may also be having an impact on population trends. In general, since the cod moratoria, the greatest population declines have occurred in the regions of the Province most dependent on the groundfish industry (Department of Fisheries and Aquaculture 2003).

2.2.4 Age, gender, and mother tongue

The population age structure for the western Newfoundland and southern Labrador region closely approximates that of the Province (Table 7). The changes in age structure for the ten-year period between 1996 and 2006 show an aging population, with an increasing proportion of the population represented by individuals 65 years in age and older and a smaller proportion of young people entering the population (Figure 6). This trend is having an impact on the labour force, as evidenced by the figures on work force participation rate (see Section 6) and by studies by the provincial Department of Human Resources, Labour and Employment (2005).



Source: Community Information Database 2008.

Figure 6. Population age structure for western Newfoundland and southern Labrador coastal areas, Newfoundland and Labrador, and Canada as a whole, 1996 – 2006.

Table 7. Population by age group for western Newfoundland and southern Labrador coastal areas, 1996-2006.

Year	Coastal Area	Age Group						
		0-14	15-24	25-34	35-44	45-54	55-64	65+
2006	Bay St. George/Port au Port	3,200	2,605	1,770	3,080	3,695	3,180	3,530
	Bay of Islands	4,360	3,560	3,145	4,160	4,870	3,910	4,510
	Great Northern Peninsula	1,580	1,450	1,070	2,010	2,265	1,780	1,840
	Southern Labrador	305	215	175	325	300	280	250
	Total Region	9,445	7,830	6,160	9,575	11,130	9,150	10,130
	Newfoundland and Labrador	78,225	65,295	58,365	78,200	85,575	69,535	70,260
	Canada	3,499,915	4,220,415	4,065,965	4,228,495	5,231,060	4,441,930	3,878,230
2001	Bay St. George/Port au Port	3,965	2,920	2,390	3,650	3,630	2,480	2,795
	Bay of Islands	4,570	3,865	3,255	4,630	4,675	3,095	3,695
	Great Northern Peninsula	2,100	1,810	1,520	2,415	2,190	1,475	1,625
	Southern Labrador	350	285	290	315	245	210	245
	Total Region	10,985	8,880	7,455	11,010	10,740	7,260	8,360
	Newfoundland and Labrador	89,060	73,100	66,535	85,045	82,610	52,660	59,055
	Canada	3,682,085	4,099,935	3,831,040	4,594,830	4,885,890	3,656,050	3,371,220
1996	Bay St. George/Port au Port	5,315	3,715	3,380	4,130	3,250	2,210	2,445
	Bay of Islands	5,705	4,865	4,415	5,105	4,200	2,840	3,330
	Great Northern Peninsula	2,940	2,320	2,345	2,570	2,000	1,245	1,475
	Southern Labrador	430	300	365	335	235	160	130
	Total Region	14,390	11,200	10,505	12,140	9,685	6,455	7,380
	Newfoundland and Labrador	109,815	88,245	85,055	91,600	72,695	44,630	55,115
	Canada	3,907,230	3,948,085	3,915,700	4,992,975	4,395,765	2,905,830	3,206,940

Source: Community Information Database 2008.

The gender structure for the coastal areas shows a slightly higher proportion of females in three of the four areas during 2006 and a shift towards females for the Great Northern Peninsula during the period 1996-2006 (Table 8).

Table 8. Population gender structure for western Newfoundland and southern Labrador coastal areas, 1996 – 2006.

Coastal Area	2006		2001		1996	
	Males (%)	Females (%)	Males (%)	Females (%)	Males (%)	Females (%)
Bay St. George/Port au Port	49	51	49	51	49	51
Bay of Islands	48	52	48	52	49	52
Great Northern Peninsula	49	51	50	50	51	49
Southern Labrador	51	49	51	49	52	48
Total Region	49	51	49	51	50	51
Newfoundland and Labrador	49	51	49	51	49	51
Canada	49	51	49	50	49	51

Source: Statistics Canada, Census 2001 - 2006.

Other demographic data concerning population age, family, household, and gender structure for coastal areas are presented in Appendices A-7 through A-10.

English is the most common language by mother tongue, with French occupying a higher proportion in the Bay St. George/Port au Port coastal area than any other

coastal area (Table 9), which may be attributed to the higher number of French speaking residents of the Bay St. George/Port au Port area. The Southern Labrador coastal area has the highest proportion of mixed English/French mother tongue, which is not surprising, given the proximity to the Quebec border and the influence of French culture and language on the communities of Blanc-Sablon and the Labrador Straits.

From a linguistic perspective, Bay St. George, Port au Port Peninsula, and the Codroy Valley have a rich linguistic history that includes French and Scots Gaelic as well as French, English, and the Mi'kmaw language. In recent years, Corner Brook and Stephenville have become home to new immigrants who have brought with them the mother tongues of their former countries.

Table 9. Percent distribution of population by mother tongue for western Newfoundland and southern Labrador coastal areas, 2006.

Coastal Area	English (%)	French (%)	Non-official language (%)	English and French (%)	English and non-official language (%)	French and non-official language (%)	English, French and non-official language (%)
Bay St. George/Port au Port	95.1	2.6	2.0	0.4	0.0	0.0	0.0
Bay of Islands	98.4	0.3	1.3	0.0	0.0	0.0	0.0
Great Northern Peninsula	98.9	0.2	0.9	0.0	0.0	0.0	0.0
Southern Labrador	98.1	0.6	1.1	0.8	0.0	0.0	0.0
Total Region	97.4	1.1	1.4	0.2	0.0	0.0	0.0
Newfoundland and Labrador	97.6	0.4	1.9	0.1	0.1	0.0	0.0
Canada	57.2	21.8	19.7	0.3	0.8	0.1	0.0

Source: Statistics Canada, Census 2006.

2.2.5 Population projections

Since no data were available for population projections by census subdivision, it was not possible to create population projections specific to the coastal areas. Projection data were organized by Regional Economic Development Zones.

The RED Zones are described in Table 10 and in a map presented as Figure 3.

Table 10. Regional Economic Development Zone descriptions.

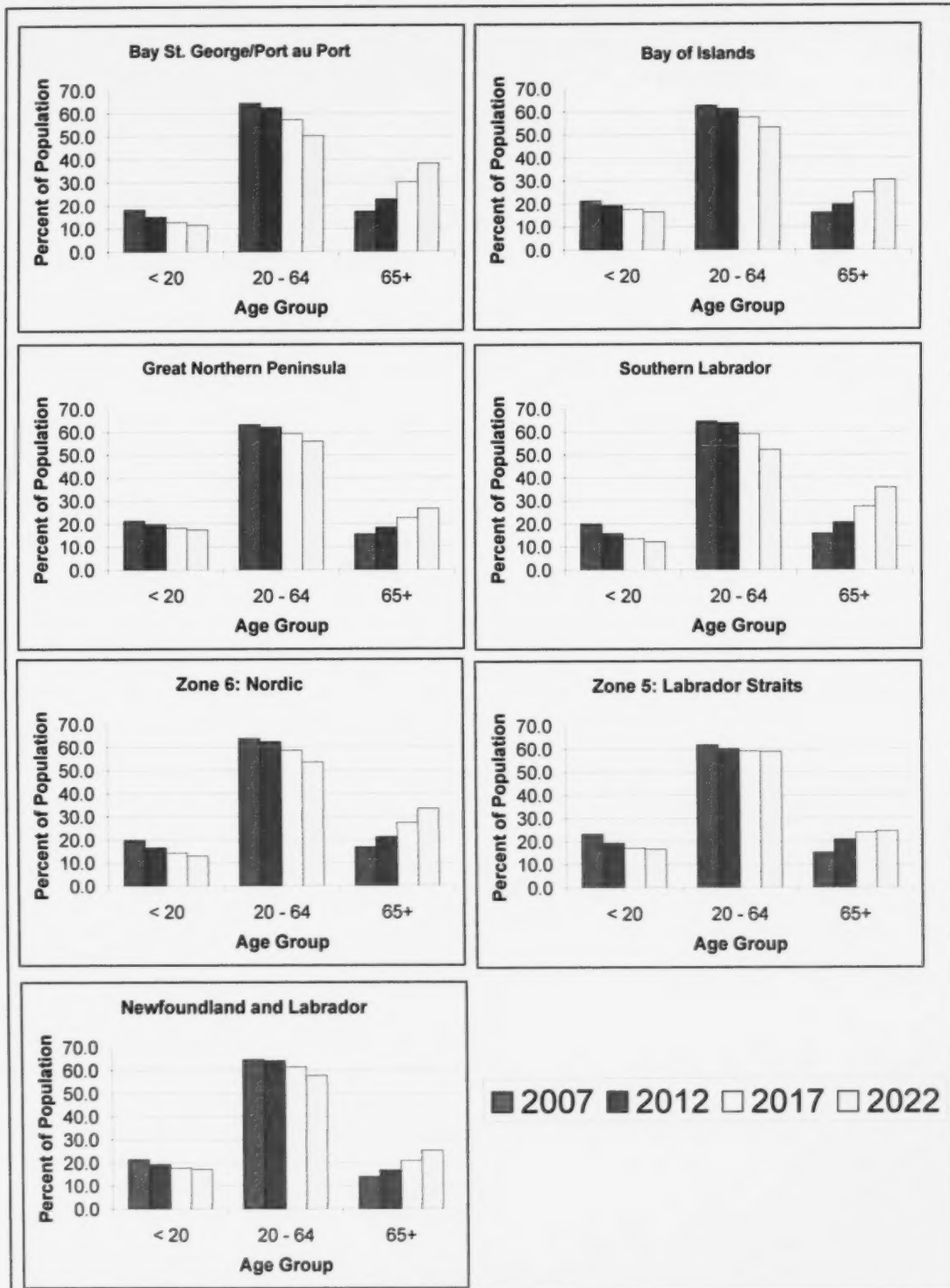
Regional Economic Development Zone	Description
Zone 10: Marine and Mountain	Port aux Basques / Doyles / Rose Blanche
Zone 9: Long Range	Stephenville / Port au Port / Burgeo
Zone 8: Humber	Deer Lake / Humber Area / Corner Brook
Zone 7: Red Ochre	Gros Morne Area, Viking Trail North to and including Plum Point
Zone 6: Nordic	Viking Trail, St. Anthony South West to Plum Point, East to Roddickton/Englee
Zone 5: Labrador Straits	Labrador Straits (L'Anse au Clair to Red Bay)

Population projections indicate a future decline in the proportion of youth and in the working age segment of the population. These trends are predicted to be less dramatic in the Humber and Southern Labrador Regional Economic Development Zones, where it is projected that by the year 2022 residents age 65 and older will still represent less than 30% of the population (Table 11, Figure 7).

Table 11. Population projections by Regional Economic Development Zones, 2007 – 2022.

Economic Zone	Year	Total	< 20	20 - 64	65+
Zone 10: Marine and Mountain	2007	8,978	1,638	5,785	1,555
	2022	7,130	817	3,587	2,726
	% Change 2007-2022	-20.6	-50.1	-38.0	75.3
Zone 9: Long Range	2007	21,576	4,592	13,505	3,479
	2022	18,701	3,078	9,950	5,673
	% Change 2007-2022	-13.3	-33.0	-26.3	63.1
Zone 8: Humber	2007	41,140	8,776	25,974	6,390
	2022	39,462	6,906	22,067	10,489
	% Change 2007-2022	-4.1	-21.3	-15.0	64.1
Zone 7: Red Ochre	2007	8,967	1,773	5,789	1,405
	2022	8,214	1,000	4,282	2,932
	% Change 2007-2022	-8.4	-43.6	-26.0	108.7
Zone 6: Nordic	2007	8,579	1,679	5,467	1,433
	2022	7,508	973	4,028	2,507
	% Change 2007-2022	-12.5	-42.0	-26.3	74.9
Zone 5: Labrador Straits	2007	1,808	418	1,115	275
	2022	1,595	267	938	390
	% Change 2007-2022	-11.8	-36.1	-15.9	41.8
Newfoundland and Labrador	2007	506,275	108,129	327,592	70,554
	2022	483,239	82,447	279,103	121,689
	% Change 2007-2022	-4.6	-23.8	-14.8	72.5

Source: Department of Finance, Newfoundland and Labrador Statistics Agency 2008.



Source: Government of Newfoundland and Labrador, Department of Finance 2008.

Figure 7. Population projections (percent) by Regional Economic Development Zones, 2007 – 2022.

2.2.6 Education

Highest level and major field of education

Data on highest level and major field of education were available only for 1996 and 2001 (Table 12). The percentage of adult residents with grade 9-13 as the highest level of education completed decreased in 2001 compared to 1996 in all areas except Southern Labrador. However, the percentage of adult residents with trades certificates as the highest level increased in all areas while the percentage with university without degree decreased, and the percentage holding a university bachelor's degree or higher increased for all coastal areas except the Great Northern Peninsula and Southern Labrador. The percentage of residents possessing a university bachelor's degree or higher likely would improve if the geographic limits of the coastal areas were to include larger centres just outside the coastal area boundaries (e.g., Port aux Basques, St. Anthony, and the rest of the Humber Valley). Overall, the data for 1996-2001 shows an 6.9% increase in the proportion of the population throughout the region with post-secondary qualifications (Table 12).

Table 12. Highest level of education for western Newfoundland and southern Labrador coastal areas, 1996 and 2001.

Highest Level of Education (%)		Bay St. George/Port au Port	Bay of Islands	Great Northern Peninsula	Southern Labrador	western Newfoundland and southern Labrador Region	Newfoundland and Labrador	Canada
2001	Less than grade 9	20.5	15.0	29.2	22.6	20.0	16.6	10.5
	Grade 9 - 13	33.7	31.6	36.8	38.4	33.6	32.1	31.3
	Trades certificate or diploma or Other Non-University Education	33.8	36.8	25.1	31.9	33.2	34.4	34.3
	University without degree	5.0	6.5	4.1	1.8	5.4	6.5	7.0
	University with bachelor's degree or higher	7.0	10.1	4.8	5.4	7.9	10.5	16.9
1996	Less than grade 9	21.2	16.3	29.0	24.3	20.7	17.5	12.1
	Grade 9 - 13	40.5	38.4	41.9	34.1	39.7	37.8	37.0
	Trades certificate or diploma or Other Non-University Education	25.3	26.8	17.8	25.5	24.4	26.0	27.9
	University without degree	7.7	11.2	6.4	10.1	9.0	10.7	9.7
	University with bachelor's degree or higher	5.3	7.4	4.9	6.0	6.2	8.1	13.3

Source: Community Information Database 2008.

In all four coastal areas, the most common fields of education are: 1) engineering and applied science technologies and trades; 2) commerce, management and business administration; and 3) educational, recreational & counselling services (Table 13). The percentage of the population with education in fine and applied arts and in humanities and related fields is lower for the region than for Canada as a whole, while the percentage majoring in engineering and applied sciences technologies and trades is higher.

Table 13. Major field of education for western Newfoundland and southern Labrador coastal areas, 1996 and 2001.

Major Field of Education Population 15 years and over (%)		Bay St. George/Port au Port	Bay of Islands	Great Northern Peninsula	Southern Labrador	western Newfoundland and southern Labrador Region	Newfoundland and Labrador	Canada
2001	Educational, recreational & counselling services	13.9	9.8	12.9	11.0	11.8	12.1	10.4
	Fine & applied arts	5.0	3.5	6.1	6.1	4.5	4.1	5.5
	Humanities & related fields	2.3	3.6	2.5	4.9	3.1	3.4	6.4
	Social sciences & related fields	6.9	5.7	5.4	2.4	6.1	5.8	9.9
	Commerce, management and business administration	21.7	23.7	23.5	18.3	23.3	24.1	21.9
	Agricultural and biological sciences/technologies	4.0	3.7	4.9	4.9	4.1	4.3	4.8
	Engineering & applied sciences	1.4	2.6	0.3	0.0	1.8	2.0	4.7
	Engineering and applied science technologies and trades	35.5	29.5	34.2	48.8	33.1	30.4	21.3
	Health professions, sciences & technologies	8.5	15.8	9.1	3.7	12.4	11.6	11.1
	Mathematics and physical sciences	0.6	1.8	1.0	0.0	1.3	2.1	3.8
	No specialization and all other, n.e.c.	0.2	0.2	0.0	0.0	0.2	0.2	0.2
1996	Educational, recreational & counselling services	12.4	11.1	15.3	18.8	12.5	12.1	10.6
	Fine & applied arts	3.2	4.5	4.4	4.2	4.1	3.9	5.6
	Humanities & related fields	1.8	3.7	3.5	4.2	3.2	3.6	6.3
	Social sciences & related fields	6.5	5.8	6.1	2.1	6.1	5.7	9.6
	Commerce, management and business administration	23.1	23.4	15.8	13.5	22.2	24.7	22.2
	Agricultural and biological sciences/technologies	4.4	2.7	5.3	0.0	3.6	4.1	4.7
	Engineering & applied sciences	0.3	1.7	0.9	7.3	1.3	1.9	4.1
	Engineering and applied science technologies and trades	37.1	31.6	37.7	37.5	35.0	30.3	22.0
	Health professions, sciences & technologies	7.4	14.2	7.9	10.4	11.2	11.4	11.3
	Mathematics and physical sciences	2.3	1.5	1.8	2.1	1.8	2.1	3.4
	No specialization and all other, n.e.c.	0.0	0.2	0.0	2.1	0.1	0.1	0.2

Source: Community Information Database 2008.

Schools and post-secondary institutions.

There are a total of 43 primary, secondary, and all-grade schools within the western Newfoundland and southern Labrador region (Table 14). The largest number is in the Bay St. George/Port au Port coastal area and the least is in the Southern Labrador coastal area. All schools within the region are managed by the Western School District of Newfoundland and Labrador.

Table 14. Number of primary, secondary, and all-grade schools, for western Newfoundland and southern Labrador coastal areas, 2008.

Coastal Area	Number of Schools
Bay St. George/Port au Port	14
Bay of Islands	11
Great Northern Peninsula	13
Southern Labrador	5
western Newfoundland and southern Labrador Region	43

Source: Western School District 2009.

Post-secondary educational institutions exist within all but one (Southern Labrador) of the four coastal areas, with the greatest number of institutions in the Bay of Islands coastal area (Table 15). Enrolment was highest at College of the North Atlantic, a trades certificate and diploma granting institution. Included in the table are enrolment numbers for the Port aux Basques and St. Anthony campuses of the College of the North Atlantic, since these campuses are within commuting distance for many residents of the adjacent coastal area. Enrolment numbers for Academy Canada were not readily available for the years prior to 2008 at the time of this report.

Table 15. Total annual enrolment at post-secondary schools for western Newfoundland and southern Labrador coastal areas, 2003-2008.

Location	2008	2007	2006	2005	2004	2003
Bay St. George/Port au Port						
College of the North Atlantic <i>Bay St. George</i>	634	882	836	849	818	841
Bay of Islands						
Sir Wilfred Grenfell College		1,274	1,338	1,386	1,344	1,345
College of the North Atlantic <i>Corner Brook</i>	831	1,010	1,010	914	876	843
Academy Canada	255					
Great Northern Peninsula						
Bonne Bay Marine Station	65	74	121	137	88	76
Campuses outside Coastal Areas						
College of the North Atlantic <i>Port aux Basques</i>	172	233	224	244	244	266
College of the North Atlantic <i>St. Anthony</i>	111	149	158	131	124	122

Sources: Bonne Bay Marine Station - Strategic Plan, 2008. Policy, Planning and Research Analyst, College of the North Atlantic, Ian Pye, 2009. Hussey, 2007.

A number of post-secondary institutions offer educational programs that are relevant to coastal and ocean management (Table 16). In addition, the Bonne Bay Marine Station of Memorial University, located on the Great Northern Peninsula, offers university level courses and research opportunities with access to waters within Gros Morne National Park.

Table 16. Post-secondary education programs and course examples relevant to integrated coastal and oceans management for western Newfoundland and southern Labrador coastal areas.

Coastal Area	Institution	Location	Program(s)	Course Examples
Bay St. George/Port au Port	College of the North Atlantic	Stephenville	<ul style="list-style-type: none"> Community Studies Hospitality Tourism Management 	<ul style="list-style-type: none"> RED Zones Community Development
Bay of Islands	Sir Wilfred Grenfell College	Corner Brook	<ul style="list-style-type: none"> BSc Environmental Science. BA Environmental Studies BA Tourism Studies BRM (Resource Management) 	<ul style="list-style-type: none"> Freshwater Ecology Restoration and Waste Management Aquatic Chemistry Oceanography Comparative Marine Environments Newfoundland & Labrador Freshwater Resources Sustainable Resource Management I: Marine and Terrestrial Environments Conservation Planning
	College of the North Atlantic	Corner Brook	<ul style="list-style-type: none"> Environmental Technology Co-Op Fish and Wildlife Technician 	<ul style="list-style-type: none"> Environmental Impact Assessment Atlantic Canadian Hunter Education Boat Safety Course Marine/Land Radio Operator
	Academy Canada	Corner Brook	<ul style="list-style-type: none"> Diploma of Technology, Natural Resources 	<ul style="list-style-type: none"> Fish and Wildlife Biology Habitat Management Environment Impact Assessment Basics of Oil Spill Response Marine Search and Rescue/Boating Safety Fish and Wildlife Management Methods
Great Northern Peninsula	Bonne Bay Marine Station	Norris Point	<ul style="list-style-type: none"> Marine Biology Courses 	<ul style="list-style-type: none"> Marine Principles and Techniques Estuarine Fish Ecology Biology of Boreal and Arctic Seaweeds

Sources: SWGC, College of the North Atlantic, Academy Canada 2008.

Continuing education has become a vital characteristic of the fishing, processing, and tourism industries. Table 17 lists some of the courses relating to marine or marine-related professions. Not included in the information listed is the Smart Labrador program in southern Labrador, which offers sophisticated internet technology to encourage long-distance learning and continuing education.

Table 17. Continuing education courses relevant to integrated coastal and oceans management for western Newfoundland and southern Labrador coastal areas.

Coastal Area	Institution	Location	Courses	Course Fees
Bay of Islands	College of the North Atlantic	Corner Brook	Boat Safety Course	\$60.00
			Marine/Land Radio Operator	Cost Varies
Great Northern Peninsula	College of the North Atlantic	St. Anthony	Food & Beverage Training for Seafood Processors	\$1000.00
			Marine Advanced First Aid	\$200.00
	Gros Morne Institute for Sustainable Tourism	Rocky Harbour	Social Values will Motivate Sustainable Tourism Gatherings	\$600
			Edge of the Wedge: Innovation	\$999
Total WNSL Region	Professional Fish Harvesters Certification Board	Varies	Fish harvester's Apprentice, Level I or Level II courses, MED A1, MED A3	

Note: WNSL = western Newfoundland and southern Labrador region.

Sources: College of the North Atlantic 2008. Gros Morne Institute For Sustainable Tourism website 2008.

A variety of marine-related educational programs exist for youth with access to the Provincial Parks, the Bonne Bay Marine Station, and the campus of Sir Wilfred Grenfell College (Table 18).

Table 18. Youth programs relevant to coastal and oceans management for western Newfoundland and southern Labrador coastal areas.

Coastal Area	Institution/ Association	Location	Program	Program Length
Bay St. George/ Port au Port	Department of Education and the Parks and Natural Areas Division	Barachois Pond Provincial Park	Parks as Nature's Classroom	In 2007: Daily from September 11th until October 23rd
	Department of Education and the Parks and Natural Areas Division	J.T. Cheeseman Provincial Park	Parks as Nature's Classroom	In 2007: Daily from September 11th until October 23rd
Bay of Islands	A joint initiative of Sir Wilfred Grenfell College and ACAP Humber Arm Environmental Association Inc	Sir Wilfred Grenfell College, Corner Brook	Environmental Explorers Kids Program	5 Days (Day Camp)
	ACAP Humber Arm Environmental Association Inc	Bay of Islands, Humber Valley Regions (Also being expanded and adapted in other regions)	Trading Books For Boats Program	Varies by location, School program
	Aquatic Centre for Research and Education (ACRE)	Corner Brook		Spring - Summer
Great Northern Peninsula	Department of Education and the Parks and Natural Areas Division	Pistolet Bay Provincial Park/Burnt Cape Ecological Reserve	Parks as Nature's Classroom	In 2007: Daily from September 11th until October 23rd
	Bonne Bay Marine Station	Norris Point	Marine Related Children's Programs	Varies

Sources: Sir Wilfred Grenfell College; ACAP Humber Arm; Department of Environment and Conservation 2008a.

2.3 HEALTH AND COMMUNITY LIVING

The number and type of health care facilities within each coastal area are presented in Table 19. The health care facilities are funded by the government of Newfoundland and Labrador and operated by Western Regional Integrated Health Authority in western Newfoundland and Labrador-Grenfell Health Regional Health Authority in southern Labrador.

Table 19. Number and type of health care facilities within western Newfoundland and southern Labrador coastal areas, 2008.

Coastal Area	Hospitals	Health Centres	Clinics and/or Offices	Long Term Care Facilities
Bay St. George/Port au Port	1		8	1
Bay of Islands	1		4	1
Great Northern Peninsula		3	6	
Southern Labrador		1		1
Total Region	2	4	18	3

Notes: Health centres provide hospital/long term care services.

Source: Western Health Care 2009. Labrador-Grenfell Health 2009.

Results of the Canadian Community Health Survey for 2001, 2003, and 2005 by Regional Economic Development Zone indicate that the majority of the population in all zones ranked their health as "very good," which compares favourably with statistics for the Province as a whole (Table 20). In general, the proportion of the population that describes their personal health as "excellent" has declined in most zones as well as in the Province as a whole since 2001.

Table 20. Responses (percent) to self-assessed health status, by Regional Economic Development Zones in western Newfoundland and southern Labrador.

Self-assessed health status	2005			2003			2001		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Zone 10									
Excellent	9.4	10.9	10.2	20.3	10.6	15.4	47.6	20.0	33.7
Very good	35.0	53.6	44.4	52.0	48.0	50.0	26.3	50.0	38.3
Good	29.2	26.3	27.8	26.0	32.4	29.2	26.0	13.8	19.9
Fair	20.0	7.2	13.5	1.7	3.9	2.8	0.0	16.1	8.1
Poor	6.4	1.9	4.1	0.0	5.0	2.5	0.0	0.0	0.0
Zone 9									
Excellent	25.3	11.6	18.3	33.9	30.6	32.2	8.8	14.9	11.9
Very good	34.0	47.8	41.1	28.9	34.9	32.0	47.3	16.9	31.7
Good	19.3	19.1	19.2	18.4	17.3	17.8	28.0	47.5	38.0
Fair	15.6	17.5	16.6	15.7	12.1	13.9	13.0	18.8	16.0
Poor	5.7	4.0	4.8	3.1	5.1	4.2	2.9	2.0	2.4
Zone 8									
Excellent	16.0	16.7	16.3	24.8	26.9	25.9	24.9	24.2	24.5
Very good	43.8	45.4	44.6	37.5	39.9	38.7	44.1	42.8	43.4
Good	27.1	24.5	25.8	29.0	22.7	25.8	20.2	20.3	20.3
Fair	9.0	10.9	10.0	6.6	8.8	7.8	9.1	9.3	9.2
Poor	4.1	2.5	3.3	2.1	1.7	1.9	1.7	3.4	2.6
Zone 7									
Excellent	21.3	21.3	21.3	31.3	24.1	27.7	33.5	13.2	23.3
Very good	38.3	36.5	37.4	44.5	45.4	44.9	24.2	55.1	39.7
Good	29.0	28.9	29.0	14.5	25.0	19.8	31.1	21.6	26.3
Fair	7.7	8.6	8.1	7.8	3.2	5.5	4.0	6.8	5.4
Poor	3.7	4.8	4.3	1.9	2.3	2.1	7.3	3.2	5.2
Zone 6									
Excellent	19.5	20.2	19.9	14.3	11.6	13.0	21.9	11.6	16.7
Very good	36.1	44.9	40.6	32.5	56.8	44.6	40.5	45.7	43.1
Good	40.2	29.6	34.8	30.3	25.4	27.9	27.6	19.9	23.7
Fair	4.1	4.4	4.3	17.3	5.6	11.5	9.4	15.4	12.4
Poor	0.0	1.0	0.5	5.5	0.6	3.1	0.7	7.4	4.0
Zone 5									
Excellent				24.8	30.8	27.7			
Very good				53.2	43.4	48.4			
Good				18.4	25.9	22.1			
Fair				3.7	0.0	1.9			
Poor				0.0	0.0	0.0			
Newfoundland and Labrador									
Excellent	19.5	18.2	18.8	18.8	23.4	21.1	24.1	21.3	22.6
Very good	43.3	47.9	45.7	45.5	45.4	45.4	43.1	44.5	43.8
Good	25.1	22.1	23.6	23.6	21.4	22.5	20.6	21.7	21.1
Fair	8.2	8.7	8.5	8.0	7.0	7.5	9.0	9.5	9.3
Poor	3.9	3.0	3.5	4.1	2.8	3.4	3.2	3.1	3.1

Note: Limited data available for Zone 5.

Source: NL Statistics Agency, Community Accounts 2009.

Hospital departures, also called morbidity separations, are represented by the number of people leaving hospitals in discharges, transfers, or deaths. Hospital departures were highest in Regional Economic Development Zone 8, which is the

zone with the highest population and servicing a larger geographic area (Table 21). Diagnoses reported most often are those of the circulatory system, except for females in Zone 9 (Long Range) and Zone 5 (Labrador Straits), where in both cases diseases of the digestive system ranked higher. Median age for females is less than males in all cases.

Table 21. Hospital departures summary by Regional Economic Development Zones in western Newfoundland and southern Labrador, 2000-2004.

2000 - 2004	Total	Males	Females	Total	Males	Females
	Zone 10 - Port aux Basques / Doyles / Rose Blanche			Zone 9 - Stephenville / Port au Port / Burgeo		
Hospital departures	6,435	3,105	3,330	13,180	5,950	7,235
Selected diagnosis						
Diseases of the circulatory system	985	570	410	1,625	970	660
Diseases of the digestive system	785	405	385	1,310	585	725
Diseases of the respiratory system	505	310	190	1,170	590	580
Diseases of the genitourinary system	475	175	305	945	390	555
Injury and poisoning	405	205	200	830	470	360
Neoplasms (cancer)	490	255	235	960	470	490
Infectious and parasitic diseases	50	25	25	150	80	65
Endocrine, nutritional	230	125	105	425	190	235
Median age	55	60	49	52	58	45
Days in hospital (average)	6.2	6.6	5.7	8.3	8.8	7.9
	Zone 8 - Deer Lake / Humber Area / Corner Brook			Zone 7 - Gros Morne Area, Viking Trail North to and including Plum Point		
Hospital morbidity	27,455	11,915	15,535	7,485	3,375	4,110
Selected diagnosis						
Diseases of the circulatory system	4,070	2,245	1,830	1,085	565	515
Diseases of the digestive system	2,800	1,210	1,590	730	365	365
Diseases of the respiratory system	2,420	1,250	1,170	795	405	395
Diseases of the genitourinary system	1,840	555	1,285	535	165	370
Injury and poisoning	1,775	990	785	445	250	195
Neoplasms (cancer)	1,975	905	1,070	455	195	260
Infectious and parasitic diseases	320	160	160	100	40	60
Endocrine, nutritional	670	310	360	190	75	115
Median age	52	57	47	55	60	51
Days in hospital (average)	9.4	9.9	9	7.1	7.5	6.7
	Zone 6 - Viking Trail, St. Anthony South West to Plum Point, East to Roddickton/Englee			Zone 5 - Labrador Straits (L'Anse au Clair to Red Bay)		
Hospital morbidity	9,475	4,485	4,985	1,770	870	895
Selected diagnosis						
Diseases of the circulatory system	1,370	730	635	210	135	75
Diseases of the digestive system	1,055	450	605	210	90	120
Diseases of the respiratory system	880	505	375	130	65	65
Diseases of the genitourinary system	585	220	370	90	45	45
Injury and poisoning	680	380	300	140	70	70
Neoplasms (cancer)	390	215	180	70	35	35
Infectious and parasitic diseases	80	45	35	10	5	5
Endocrine, nutritional	290	125	165	50	20	30
Median age	55	60	50	55	61	48
Days in hospital (average)	6	6.5	5.6	5.1	5.8	4.4
Provincial Average - Days in Hospital	7.9	8.5	7.5	7.9	8.5	7.5

Source: NL Statistic Agency, Community Accounts 2008.

2.4 GOVERNANCE STRUCTURES

The governance and management of ocean related activities in the western Newfoundland and southern Labrador region is an interactive process involving federal, provincial, regional, municipal, Aboriginal, industry, resource user, non-governmental organization, community, and academic/research interests. Key organizations representing these interests include the Government of Canada, Government of Newfoundland and Labrador, Aboriginal groups, municipalities, Regional Economic Development Boards, nongovernmental organizations, and business and industry.

2.4.1 Federal and provincial departments and agencies

The lead federal organization in oceans management is Fisheries and Oceans Canada, which is responsible for coordinating federal policies and programs related to oceans, including fisheries, habitat, conservation and protection, maritime safety, aquaculture, hydrographic services, and integrated management.

Federal departments and the corresponding Acts and Accords that describe specific responsibilities for the management of marine activities through policies, legislation, regulation, programs, or services are listed in Table 22.

Table 22. Federal departments governed by legislation applicable to the oceans management sector.

Department	Legislation
Fisheries and Oceans Canada	<i>Oceans Act, Canada Shipping Act, Coastal Fisheries Protection Act, Fisheries Act, Fisheries Development Act, Fishing and Recreational Harbours Act, Fish Inspection Act, Government Organization Act, Navigable Waters Act, Oceans Act, Species at Risk Act</i>
Department of Foreign Affairs and International Trade	<i>Coasting Trade Act, Foreign Affairs and International Trade Act, Oceans Act</i>
Department of National Defence	<i>Canadian Shipping Act, Emergencies Act, International Convention for the Safety of Life at Sea</i>
Department of Justice	<i>Department of Justice Act, Oceans Act</i>
Department of Indian and Northern Affairs	<i>Arctic Waters Pollution Prevention Act, Canada Petroleum Resources Act, Nunavut Land Claims Agreement Act, Western Arctic (Inuvialuit) Claims Settlement Act</i>
Natural Resources Canada	<i>Arctic Waters Pollution Prevention Act, Canada-Newfoundland Atlantic Accord Implementation Act, Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act, Canada Oil and Gas Operators Act, Canadian Petroleum Resources Act, Resource and Technical Surveys Act, Species at Risk Act</i>
Transport Canada	<i>Canada Shipping Act, Coastal Trade Act, Government Organization Act, International Convention for the Safety of Life at Sea, National Transportation Act (1987), Pilotage Act, Public Harbours and Port Facilities Act, St. Lawrence Seaway Authority Act, Shipping Conference Exemption Act (1987)</i>
Privy Council Office	<i>Canadian Transportation Accident Investigation and Safety Board Act</i>
Environment Canada	<i>Canadian Wildlife Act, Canadian Environmental Assessment Act, Canadian Environmental Protection Act, Fisheries Act (sections 36-42), Government Organizations Act, Migratory Birds Convention Act, Species at Risk Act</i>
Department of Canadian Heritage	<i>National Parks Act, Species at Risk Act</i>
Health Canada	<i>Food and Drug Act</i>
Public Works and Government Services Canada	<i>Department of Public Works and Government Services Act</i>

Provincial government departments with managerial jurisdiction over human activities within coastal and estuarine areas are given in Table 23. The Department of Fisheries and Aquaculture (DFA) and the Department of Environment and Conservation (DEC) share the lead in integrated coastal and oceans management for the Province of Newfoundland and Labrador. The DFA is responsible for the coordination and management of licensing, fish and seafood processing, and aquaculture and plays a key role in fishing and aquaculture diversification, quality assurance, inspection, and regulatory enforcement. The DEC is responsible for protection and enhancement of land and freshwater resources, the quality of the natural environment, the conservation of inland fish and wildlife species, and the administration of parks and ecological reserves. The DEC also coordinates environmental assessments and works to prevent water, air, and soil pollution.

Table 23. Provincial government departments and legislation applicable to the oceans management sector.

Department	Legislation
Department of Environment and Conservation	<i>Environment Act, Environment Assessments Act, Endangered Species Act, Provincial Parks Act, Wilderness and Ecological Reserves Act, Waste Materials Disposal Act, Pesticides Act, Water Resources Act</i>
Department of Fisheries and Aquaculture	<i>Professional Fish Harvesters Act, Federal Provincial Joint Fisheries and Aquaculture Development Agreements, Aquaculture Act and Regulations, Fisheries Restructuring Act, Fish Inspection Act, Fisheries Loan Act, Endangered Species Act</i>
Department of Government Services and lands	<i>Lands Act, Occupational Health and Safety Act</i>
Department of Natural Resources	<i>Canada Newfoundland Atlantic Accord Implementation Act</i>
Department of Municipal and Provincial Affairs	<i>Municipalities Act</i>
Department of Tourism Culture and Recreation	<i>Historic Resources Act, Provincial Parks Act, Wilderness and Ecological Reserves Act, Archives Act</i>
Innovation, Trade and Rural Development	<i>Economic Diversification and Growth Enterprises Act</i>

2.4.2 Federal and provincial government legislative representation

The western Newfoundland and southern Labrador region encompasses portions of three federal electoral districts and eight provincial electoral districts, as listed in Table 24.

Table 24. Federal riding and provincial electoral divisions representing communities of the western Newfoundland and southern Labrador coastal areas.

Federal Districts		
Coastal Area(s) represented	Electoral District Name	Member of Parliament
Bay St. George/Port au Port	Random-Burin-St. George's	Judy Foote
Bay of Islands, Great Northern Peninsula	Humber-St. Barbe-Baie Verte	Gerry Byrne
Southern Labrador	Labrador	Todd Norman Russell
Provincial Electoral Districts		
Coastal Area(s) represented	District Name	Member of the House of Assembly
Bay of Islands	Bay of Islands	Terry Loder
	Humber East	Tom Marshall
	Humber Valley	Darryl Kelly
	Humber West	Danny Williams
Bay St. George/Port au Port	Port au Port	Tony Cornect
	St. George's - Stephenville East	Joan Burke
Great Northern Peninsula	St. Barbe	Wallace Young, Jr
Southern Labrador	Cartwright L'Anse au Clair	Yvonne Jones

Sources: Elections Canada 2009; Elections Newfoundland and Labrador 2009.

2.4.3 Municipal governments

There are 282 incorporated municipalities in Newfoundland and Labrador, of which 45 occur in the western Newfoundland and southern Labrador region (Table 25). There are also 39 local service districts among the four coastal areas. Communities not incorporated as municipalities are organized as local service districts, which is a common practice in the Bay St. George/Port au Port and Great Northern Peninsula coastal areas. Communities derive the authority to incorporate and to collect taxes under the Municipalities Act. Local service districts may also be incorporated and although they do not collect taxes they can charge a fee for services such as solid waste collection, street lighting, and water service.

Table 25. Incorporated municipalities and local service districts for western Newfoundland and southern Labrador coastal areas, 2008.

Municipalities		Local Service Districts	
Bay St. George/Port au Port			
1. Cape St. George	2. Port au Port West-Aguathuna-Felix Cove	1. Barachois Brook	2. O'Regans East
3. Kippens	4. St. George's	3. Black Duck	4. Piccadilly Head
5. Lourdes	6. Stephenville	5. Bay St. George South	6. Piccadilly Slant-Abraham's Cove
7. Port au Port East	8. Stephenville Crossing	7. Benoit's Siding	8. Searston
		9. Black Duck Brook-Winterhouse	10. Sheaves Cove
		11. Campbell's Creek	12. Ship Cove-Lower Cove-Jerry's Nose
		13. Cape Ray	14. St. Andrews
		15. Flat Bay	16. Three Rock Cove
		17. Great Codroy	18. Tompkins
		19. Mainland	20. Upper Ferry
		21. Mattis Point	22. West Bay
Bay of Islands			
1. Gillams	2. Massey Drive		
3. Hughes Brook	4. Humber Arm South		
5. Irishtown-Summerside	6. Cox's Cove		
7. McIvers	8. Lark Harbour		
9. Meadows	10. Mount Moriah		
11. Corner Brook	12. York Harbour		
Great Northern Peninsula			
1. Anchor Point	2. Norris Point	1. Bartletts Harbour	2. Green Island Brook
3. Bellburns	4. Parson's Pond	3. Black Duck Cove	4. L'Anse aux Meadows
5. Glenburnie-Birchy Head-Shoal Brook	6. Port au Choix	5. Forresters Point	6. Brig Bay
7. Bird Cove	8. Port Saunders	7. Pidgeon Cove-St. Barbe	8. Plum Point
9. Woody Point	10. Raleigh	9. Black Tickle-Domino	10. Pollard's Point
11. Cook's Harbour	12. River of Ponds	11. Castor River North	12. Portland Creek
13. Cow Head	14. Rocky Harbour	13. Castor River South	14. Ship Cove(Northern Pen.)
15. Daniel's Harbour	16. St. Pauls	15. Nameless Cove	16. Reef's Harbour-Shoal Cove West-New Ferolle
17. Flower's Cove	18. Trout River	17. Eddies Cove West	
19. Hawke's Bay			
Southern Labrador			
1. Forteau	2. Pinware		
3. L'Anse au Clair	4. Red Bay		
5. L'Anse au Loup	6. West St. Modeste		

Source: Department of Municipal Affairs 2009.

Municipalities are governed by an elected council and Mayor, while operations are administered through hired staff such as a town clerk. Many communities cannot afford full time staff.

Municipalities Newfoundland & Labrador (MNL), established in 1951, represents the interests of municipal councils in the Province. The MNL provides information, networking, and training through its Annual General Meetings and symposia on topical issues such as funding for infrastructure development.

Recognizing a gap in basic municipal information in the Province, MNL's Community Cooperation Resource Centre, known as CCRC, conducted a survey of municipalities in 2003 and a follow-up in 2007. Although data specific to municipalities of the western Newfoundland and southern Labrador region were not readily available for this report, the 2007 survey results (Municipalities Newfoundland and Labrador 2007) reveal important changes occurring among the smaller municipalities of the Province as a whole.

The Government of Newfoundland and Labrador defines "small communities", in general, as those communities having less than 4,000 residents. However, for the purposes of the survey, Municipalities Newfoundland and Labrador grouped municipalities into three categories: "small" (<1,000 residents), "medium" (1,000-3,999), and "urban" (4,000+). Using the MNL definitions, small municipalities comprise 75% of all municipalities in the Province and the vast majority of all of the municipalities of the western Newfoundland and southern Labrador region.

Comparing the 2007 to 2003 results reveals an increase from 53% to 74% in the number of municipalities throughout the Province that are engaged in service sharing with neighbouring municipalities or other partners. Service sharing—a term that does not include amalgamation or merger—is a formal or informal arrangement organized for the purpose of maintaining existing services for residents. Service sharing most often addresses needs for fire protection followed by waste disposal and garbage collection.

In 2007, 79% of all municipalities in the Province reported having internet access. In the MNL survey, this broke down as 74% of all small, 87% of mid-sized, and 100% of urban municipalities. Additional results of the survey revealed that while only 46% of municipalities have a website, 76% have an email address. No data were available that pertained exclusively to the western Newfoundland and southern Labrador region.

A spectrum of cooperation among municipalities exists, which defines the level of commitment entered into between two or more neighbouring municipalities. Municipal Joint Councils, which have no legal standing and operate on a volunteer basis, are becoming increasingly popular in the Province as a means for neighbouring municipalities to communicate and advocate on issues of common concern.

2.4.4 Traditional/Aboriginal governance

The western Newfoundland and southern Labrador region is home to two Aboriginal groups, the Mi'kmaq people, most of whom reside in the Bay St. George and Corner Brook areas, and the Labrador Métis, most of whom reside in Southern Labrador.

While members of other Aboriginal groups, such as the Labrador Inuit, may reside within the region, their homeland is Nunatsiavut in northern Labrador.

Mi'kmaq

Nine local bands occur within the region, six of which are members of the Federation of Newfoundland Indians (Table 26). Local membership is growing rapidly as a result of enthusiasm for the Agreement-in-Principle and the anticipated benefits that may accrue to the members.

Table 26. Band offices for western Newfoundland and southern Labrador coastal areas.

Band	Contact/Chief	Member of FNI	# of Members
Bay St. George/Port au Port			
Port au Port Indian Band	Chief Laetitia MacDonald, PO Box 520, Port au Port, NL, A0N-1T0, (709) 648-2692	Yes	400
Indian Head First Nations	Chief Hayward Young, Suite 131, 35 Carolina Ave, Stephenville, NL, A2N 1P8, (709) 643-5215	Yes	2,500
St. George's Indian Band	Chief Karen White, PO Box 262, St. George's, NL, A0N 1Z0	Yes	1,500
Ktaqamkuk Mi'kmaq Alliance	Chief Burt Alexander, PO Box 20021, Town Centre, Stephenville, NL, A2N-3R8, (709) 643-6444 (College), (709) 643-6555 (Band Office), (709) 643-9679 (fax)	No	
Flat Bay Indian Band Council	Chief Liz LaSage, PO Box 15, Site 12, Flat Bay, NL, A0N 1Z0	Yes	547
Benwah First Nation	Chief Jasen Benwah, 805 Oceanview Drive, De Grau, NL, A0N 1T1, (709) 643-9113, www.benwahfirstnation.ca	No	
Kitpu First Nations	Evelyn Campbell, 69 Colonial Ave., Stephenville, NL, A2N 1Y9, (709)643-2132	No	
Bay of Islands			
Corner Brook Indian Band	Chief Ed Webb, 709-634-1696	Yes	3,500
Elmastogoeg First Nations	Chief Kevin Barnes, Benoit's Cove, 709-789-2726	Yes	1,000-1,229

Note: All numbers are rough approximations, as provided by band members in June 2008.

Membership is growing. Data for Elmastogoeg could not be confirmed. Membership count for Corner Brook Indian Band includes individuals currently living out of Province.

Sources: Federation of Newfoundland and Labrador Indians; personal communications with Band Chiefs.

The Federation of Newfoundland Indians (FNI) promotes the social, cultural, economic, and educational well-being of the Mi'kmaq people of Newfoundland and works to establish band status for its people. The FNI maintains its head office in Corner Brook. The FNI and the Miawpukek First Nation, who are status Indians with a reserve at Conne River near Baie d'Espoir on the South Coast, have come together under the Fisheries and Oceans Canada protocols of the Aboriginal Aquatic Resource & Oceans Management (AAROM) program to form the Mi'kmaq Alsumk Mowimsikik Koqoey Association (MAMKA). A goal of the AAROM program is to help Aboriginal groups participate effectively in multi-stakeholder advisory and decision-making processes used for aquatic resources and oceans management (FNI 2008a).

Unlike the Miawpukek First Nation at Conne River, the Mi'kmaq people of western Newfoundland are non-reserve Indians and, until recently, were considered non-status Indians. On November 30, 2007, Prime Minister Stephen Harper announced an Agreement-in-Principle had been reached that would allow those members of the Mi'kmaq of Newfoundland who do not belong to the Miawpukek First Nation to obtain official recognition as status Indians under the Indian Act. The FNI anticipates that the registration and enrolment process will begin in the fall of 2008. Following the first phase of registration, an Order in Council forming the Qalipu Mi'kmaq First Nation Band and its founding members will be issued. No reserve will be created as a result of this agreement (FNI 2008b). The Agreement-in-Principle for the recognition of the Qalipu Mi'kmaq First Nation Band was ratified by FNI in March 2008 and is scheduled for ratification by the government of Canada once more than 50% of FNI members have registered.

Labrador Métis

The largest Aboriginal organization in Newfoundland and Labrador is the Labrador Métis Nation (LMN), which was formerly known as the Labrador Métis Association. The LMN is committed to promoting and ensuring the basic human rights of its members as Aboriginal persons, and the collective recognition of these rights by all levels of government. For years the LMN has been working on official recognition by the Province. The headquarters of the LMN is in Happy Valley-Goose Bay; many of the LMN's members live in Southern Labrador.

A Labrador Métis is a person of mixed Aboriginal and European ancestry who can trace his/her ancestors back to either an Inuit or Innu of Labrador. The majority of residents who claim membership with the LMN are of partial Inuit stock. Increasingly the LMN is using the term Labrador Inuit-Métis to describe its membership.

The Labrador Métis believe strongly in their right to pursue certain subsistence activities involving the harvest of local resources and to manage their own resources at sustainable levels.

2.4.5 Institutional/industry and non-governmental organizations

2.4.5.1 Regional Economic Development Corporations: During the mid-1990s the provincial government established 20 Regional Economic Development (RED) Corporations across the Province. The board of directors for each corporation is responsible for implementing regional economic development initiatives within a specific geographic area, referred to as a Regional Economic Development Zone.

The western Newfoundland and southern Labrador region contains portions or all of six Regional Economic Development Zone jurisdictions (Figure 3): 1) Zone 10, Marine and Mountain Zone Corporation; 2) Zone 9, Long Range Mountain Economic Development Board; 3) Zone 8, Humber Economic Development Board; 4) Zone 7, Red Ochre Regional Board; 5) Zone 6, Nordic Economic Development Corporation; and 6) Zone 5, Labrador Straits Development Corporation.

2.4.5.2 Rural Secretariat: A Rural Secretariat established by the Government of Newfoundland and Labrador in 2004 comprises nine regional councils and one provincial council for the purpose of providing advice and guidance on rural issues and regional strategies developed for the Province. The Secretariat helps to promote cooperation among communities, regions, and governments so as to address the social and economic needs of rural areas of the Province (Rural Secretariat 2008).

Four of the nine Rural Secretariat regions encompass portions of western Newfoundland and southern Labrador: 1) Stephenville – Port aux Basques, 2) Corner Brook – Rocky Harbour, 3) St. Anthony – Port au Choix, and 4) Labrador.

2.4.5.3 Education and health authorities: Education and health activities of the Province are organized by zones or districts that are distinct from political or Regional Economic Development Zones. The communities of the western Newfoundland and southern Labrador region are organized into one School Board district, District 2, Western.

Health services for western Newfoundland and southern Labrador communities are grouped into two Western Health Authorities: 1) Western Regional Health Authority and 2) Labrador-Grenfell Regional Health Authority.

2.4.5.4 Industry, institutional, and non-government organizations:

Industry Organizations

A total of 14 of marine-related industry boards have corporate membership with business interests in western Newfoundland and southern Labrador (Table 27). These include industry and resource users in the fishing, aquaculture, oil and gas, transportation, and tourism sectors, as well as land-based businesses in forestry, agriculture, mining, energy, and manufacturing. Many local, regional, and international industrial organizations play a role in the sustainable management and development of Newfoundland's coastal resources.

Table 27. Several of the major industry boards representing businesses in western Newfoundland and southern Labrador.

Industry Board	Mandate/Mission
Newfoundland Aquaculture Industry Association (NAIA)	Non-profit organization that represents the interests of aquaculturists in Newfoundland
Fish, Food and Allied Workers (FFAW)	The FFAW, the Province's largest private sector union, represents 20,000 working women and men in NL, most of whom are employed in the fishing industry.
Professional Fish Harvesters Certification Board	A nonprofit organization that promotes the professionalism in the fishing industry and the training and certification of harvesters.
Newfoundland Salmonid Growers Association (NSGA)	The NSGA assists the Newfoundland salmonid aquaculture industry to develop into a global supplier of top quality Atlantic salmon and steelhead trout products.
Newfoundland and Labrador Environmental Industry Association (NEIA)	NEIA's mission is to promote the growth and development of the environmental industry of NL.
The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB)	A federal-provincial authority established in 1985 to administer the relevant provisions of the Canada-Newfoundland Atlantic Accord Implementation Acts.
Newfoundland Ocean Industries Association (NOIA)	NOIA's mission is to promote development of East Coast Canada's hydrocarbon resources and to facilitate its membership's participation in oil and gas industries.
Newfoundland and Labrador Outfitters Association	A business association of hunting and fishing outfitters working in the Province. They offer services and training to members on how to improve their products.
Cruise Association of Newfoundland and Labrador	Incorporated in 2002, CANAL exists to promote the development of a cruiseship industry in the Province.
Newfoundland and Labrador Organization for Women Entrepreneurs	A nonprofit organization established to promote the success of women in business in the Province and to provide contact services.
Canadian Sealers' Association	CSA is designed to speak on behalf of the more than 6,000 sealers primarily in Newfoundland, the Quebec North Shore, and the Magdalen Islands.
Association of Seafood Producers	A not-for-profit corporation representing the interests of seafood producers in the Province.
Multi-Materials Stewardship Board (MMSB)	MMSB works with stakeholders throughout NL to develop and implement recycling and waste diversion programs.
Newfoundland and Labrador Federation of Agriculture (NLFA)	NLFA represents Newfoundland farmers in providing services that advance the socio-economic conditions of those engaged in agricultural pursuits, and to assist in formulating agricultural policies.

Academic And Research Institutions

Academic and research institutions play a role in helping the public to understand management issues, particularly in view of the shift from single sector or activity-specific management to ecosystem-based management. Academic institutions in the western Newfoundland and southern Labrador region include Sir Wilfred Grenfell College, College of the North Atlantic, Institute for Biodiversity and Ecosystem Science, Academy Canada, and the Bonne Bay Marine Station of Memorial University.

Non-Government Organizations

Approximately, 17 non-governmental organizations and small working groups exist in western Newfoundland and southern Labrador that are relevant to coastal and oceans management (Table 28).

Table 28. Several of the major non-governmental organizations and small working groups doing work in western Newfoundland and southern Labrador.

Non-governmental Organizations	Small Working Groups
ACAP Humber Arm Environmental Association	Bay St. George Seven Rivers Group
Salmon Preservation Association for the Waters of Newfoundland	Harry's River Working Group
Gros Morne Cooperating Association	Environmental Conservation Committee in Stephenville Crossing
Corner Brook Stream Development Corporation	Friends of Burnt Cape.
Ducks Unlimited	14B Lobster Protection Committee
Nature Conservancy Canada	
Newfoundland and Labrador Legacy Nature Trust	
Protected Areas Association of Newfoundland and Labrador	
Ocean Net	
Conservation Corps of Newfoundland and Labrador	
Intervale Associates Inc.	
Newfoundland and Labrador Environmental Network	

Some of these working groups often play an important role in the stewardship of coastal and marine resources. One such working group is the 14B Lobster Protection Committee, consisting largely of local harvesters in the 14B Lobster area of the Great Northern Peninsula. The group was formed in 2004 to address concerns over declining catches and the high number of licences in the St. John Bay area. The 14B Lobster area is considered close to the northern extreme of the species' range and the resource in this area has undergone considerable pressure in recent years, particularly after the cod moratorium when more harvesters converted from groundfish to lobster. An Integrated Coastal Zone Management steering committee within the Great Northern Peninsula coastal area designated the St. John Bay area one of two pilot case studies and in 2006 organized a workshop with the Lobster Protection Committee and other stakeholders to review existing scientific knowledge, best practices from other case studies, and possible solutions to ensure the sustainability of the resource (Intervale Associates 2006).

Many larger environmental non-governmental organizations are based in St. John's or Corner Brook but have direct interests in the rural areas along the western Newfoundland and southern Labrador region. These often play a role in helping to ensure the conservation and management of coastal resources and special places throughout the Province.

2.4.5.5 Coastal management steering committees: There are currently three active coastal management steering committees within the western Newfoundland and southern Labrador region. These are the Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee, the Atlantic Coastal Action Program (ACAP) Humber Arm Environmental Association Inc. and the Great Northern Peninsula Integrated Coastal Zone Management Steering Committee. The steering committees are the coordinating bodies that have undertaken initiatives to increase stakeholder involvement in the sustainable use of ocean resources and supporting habitats. They work with government agencies and local groups to identify opportunities for coastal planning initiatives, promote sustainable use of marine

resources, foster partnerships, identify sources of funding, and participate in the development of management plans. A summary of some of the current issues being addressed by the Humber Arm and the Great Northern Peninsula steering committees is presented in the document, *Issues Scan of Selected Coastal and Ocean Areas of Newfoundland and Labrador*, Department of Fisheries and Aquaculture and Department of Environment and Conservation (2008). Typically the steering committee consists of sponsoring groups representing a range of sectors, including industry, municipalities, Regional Economic Development Corporations, Aboriginal groups, Harbour Authorities, youth groups, and development associations. The committee may meet quarterly or as needed. Business is conducted under the leadership of a presiding chairperson, with an established voting process for decision-making.

The ACAP Humber Arm Environmental Association Inc. serves as the regional organizing body for coastal and ocean integrated management in the Humber Arm region. Originally incorporated in 1991 as the Humber Arm Environmental Association, it soon became one of several ACAP sites with funding from Environment Canada's Green Plan. Since the mid-1990, the organization has been a leader in integrated coastal management initiatives in the Province, having conducted a wide range of research, education, strategic planning, and public consultations on issues affecting the Humber Arm ecosystem and the quality of life for its residents. Most recent of these are the following: 1) *Nurturing a Vision of Our Coast* (Integrated Management Plan 2004), 2) *State of the Knowledge on the Bay of Islands Marine Environment*, and 3) a poster series that provides information about the Humber Arm to general audiences and school groups (Sheldon Peddle, Executive Director, Humber Arm Environmental Association, pers. comm., 2008). Through its involvement in the integrated management process, ACAP Humber Arm Environmental Association has expanded its board of directors and broadened its focus to include the entire Bay of Islands area.

The Great Northern Peninsula Integrated Coastal Zone Management (ICZM) Steering Committee began in 1999 in cooperation with the Red Ochre Regional Economic Development Board Inc. and the Nordic Economic Development Corporation. The boards assist with the coordination and administration of the coastal management steering committee. The initial project was a Community-based Resource Inventory, (CCRI) in 2000. Since then the Great Northern Peninsula ICZM Steering Committee, as it is called, has followed a step-wise plan for public consultation and awareness, identification of key issues, communications, and implementation of pilot projects. The two pilot projects involved integrated management planning for Cow Head—an area rich in natural and cultural heritage—and St. John's Bay, which is site of a lobster fishery that is under serious pressure. Two workshops were conducted in March of 2006 involving stakeholder groups from the surrounding areas (Intervale Associates 2006). Recently the Great Northern Peninsula ICZM Steering Committee prepared a draft Three-year Work Plan for 2008-2011, which calls for increased consultation and awareness-building, continued work on the two pilot projects, and new research (ICZM Steering Committee 2008).

The Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee was established in 2006 in partnership with the Long Range Regional Economic Development Board. It works to increase stakeholder involvement in the sustainable use of ocean resources and supporting habitats in the Bay St. George/Port au Port Peninsula coastal area (Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee 2006a). The committee's first task was to establish planning priorities. In November 2006 the committee held an action planning workshop that led to the establishment of short and mid-term objectives. These included hiring a resource person, developing a communications plan, and mapping current uses of the coastal area (Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee 2006b). In April 2007 the steering committee held community stakeholder meetings in Codroy, St. Georges', and Piccadilly to seek input on issues of concern and to build local support for an integrated planning process (Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee 2006). In March 2008, the steering committee conducted an analysis and assessment of issues and concerns resulting from the three community stakeholder sessions (Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee 2007).

At the time these three coastal management steering committees were established, the southern Labrador region felt it did not have the capacity to put a steering committee in place, but chose to continue to support and participate in the integrated management process.

As lead agency in integrated coastal and ocean management in the western Newfoundland and southern Labrador region, DFO has been providing guidance and direction, technical support, and financial assistance to the steering committees and their activities. Moreover, DFO has reached out to stakeholder groups and the public as a whole to build greater awareness and support for integrated management as described in the Government of Canada's Ocean Action Plan (2005). Two significant ways of doing this were the production and distribution of a summary document, *The Gulf of St. Lawrence: A Unique Ecosystem* (DFO 2005b) and a series of five public engagement workshops for western Newfoundland and southern Labrador during January and February of 2006. The workshops are described in a summary report (DFO 2006).

2.4.6 Coastal and Ocean Use

2.4.6.1 Harbour and other port administration: There are more than 550 Harbour Authorities across Canada and 43 of them exist in western Newfoundland and southern Labrador (Table 29). A detailed list of all harbour authorities and their contact information appears in Appendix C.

Table 29. Harbour Authorities within western Newfoundland and southern Labrador coastal areas.

Bay St. George/Port au Port	Great Northern Peninsula
1. Bay St. George South,	1. Anchor Point
2. Black Duck Brook	2. Bartlett's Harbour
3. Blue Beach	3. Bird Cove/Brig Bay
4. Cape St. George	4. Black Duck Cove
5. Codroy	5. Blue Cove
6. Fox Island River	6. Cook's Harbour
7. Lourdes	7. Cow Head
8. Mainland/Three Rock Cove	8. Daniel's Harbour
9. Piccadilly	9. Eddies Cove East
10. Port Harmon (Sub-Port)	10. Flower's Cove
Bay of Islands	11. Forresters Point
1. Cox's Cove	12. Green Island Brook
2. Frenchman's Cove	13. Green Island Cove
3. Lark Harbour/Little Port	14. Norris Point
Southern Labrador	15. Port au Choix
1. Forteau	16. Port Saunders
2. L'Anse au Clair	17. Raleigh
3. L'Anse au Loup	18. River of Ponds
	19. Rocky Harbour
	20. Sally's Cove
	21. Sandy Cove
	22. Savage Cove
	23. St. John Bay
	24. Shoal Cove West Reefs Harb.
	25. Straitsview
	26. Trout River
	27. Woody Point

Source: DFO 2008a.

The social and economic life of many communities in western Newfoundland and southern Labrador depends upon vibrant, working harbours. Maintaining facilities such as wharves, establishing and enforcing rules, and helping to meet the needs of harbour users is the task of a managing authority. Since 1996, Transport Canada has implemented the National Marine Policy's Port Divestiture Program, which aims to transfer ports to other federal departments, provincial governments, or local interests. In addition to the transfer of ownership, many ports and port facilities have been de-proclaimed and closed permanently. Due to its importance for inter-provincial freight and passenger transportation, the major terminal for Marine Atlantic in the town of Port aux Basques continues to be managed by Transport Canada.

The most common form of local management for the ports of western Newfoundland and southern Labrador is the Harbour Authority. Harbour Authorities are usually organized as not-for-profit corporations that operate and manage local harbours in accordance with local needs, which are often tied to the fishing industry. The Harbour

Authority program, which is managed by the Small Craft Harbours Branch of DFO, is designed to give greater control to local communities over the planning, operation, and maintenance of the harbour facilities.

Ports that are generally used for a variety of needs other than local fishing and recreational purposes may be managed as independent corporations or under provincial authority. The port facilities at St. Barbe are run by a provincial authority, specifically the Department of Transportation and Works. The main ports of Corner Brook and Stephenville are run by independent corporations.

The Corner Brook Port Corporation was established in 2001 as a not-for-profit organization to operate the Port of Corner Brook for the benefit of city and regional residents and to ensure the growth and development of high quality ocean transportation and distribution services. The Corner Brook Port area and seabed extends for approximately 40kms of inner and outer harbour, from Meadows Point on the North Shore of the Bay of Islands, through the Corner Brook waterfront approximately mid-point in the Bay of Islands South Shore.

The main Port of Stephenville, located on the North Shore of Bay St. George, is owned and operated by the Port Harmon Authority Limited, which is an independent corporation and not part of Harbour Authorities program of DFO.

The newly formed Independent Marine Ports Association of Canada, a membership-based association, serves as a voice for independent ports to liaise with government agencies and as an information exchange network for the independent ports of Canada. Corner Brook and Port Harmon are the two member ports from western Newfoundland and southern Labrador.

Some of the larger industries in the region own port facilities, such as Corner Brook Pulp and Paper in Corner Brook and Atlantic Minerals Limited at Lower Cove on the Port au Port Peninsula.

2.4.6.2 Transportation, protection of navigable waters, safety, and security: Many federal responsibilities for transportation, the protection of navigable waters, and marine safety are divided between Transport Canada and the Canadian Coast Guard, which is now a special operating agency of Fisheries and Oceans Canada.

Transport Canada

The *Canada Shipping Act, 2001* (CSA 2001), which came into force on July 1, 2007, is the principal legislation governing safety in marine transportation and recreational boating, as well as protection of the marine environment.

Transport Canada's responsibilities encompass the safety of ships, the protection of life and property, and the environment. The Marine Safety Directorate regulates marine transportation as well as the inspection of both domestic and foreign vessels in Canadian waters. The Marine Safety office in Corner Brook is staffed by three officers who cover a territory stretching from Ramea to White Bay and all of Labrador.

Among their duties is the inspection of vessels in excess of 15 gross tonnes. They also respond to reports of oil pollution from an enforcement perspective.

Transport Canada's Marine Safety office in Corner Brook is also responsible for administering the *Marine Occupational Health and Safety Regulations* (MOHS) made pursuant to the *Canada Labour Code* in respect of employees when they are on board a ship. This includes crew members, stevedores, or other shore-based employees subject to federal jurisdiction who may work on board a ship from time to time.

Transport Canada lists on its web site more than ten Acts and Regulations relative to marine navigation, shipping, and safety aspects that are relevant to the western Newfoundland and southern Labrador region as well as more than 135 on-line publications concerning topics of relevance to marine safety (Transport Canada 2008).

Transport Canada's Office of Boating and Safety promotes boating and safety awareness through prevention-based programs and information through its web site, boat shows, and publications. It also oversees the enforcement of the Small Vessel Regulations and other marine statutes applicable to small recreational vessels. An Office of Boating and Safety exists in Corner Brook.

Submarine cables, dredging, pipeline crossings, water intakes, bridges, docks, boathouses, and winter crossings are all examples of works and uses of navigable waters. Depending on the exact setting and scale of the works, such project and activities may or may not pose a threat to the ongoing safety of and public right to navigation. The Navigable Waters Protection Act (NWPA) is designed to protect the public right of navigation. It ensures that works constructed in navigable waterways are reviewed and regulated to minimize the overall impact on navigation. The Act establishes specific criteria by which a project is considered a "minor work" and therefore does not require an application under the NWPA (Transport Canada 2008). There is an office of Navigable Waters Protection in Corner Brook.

Cruise vessels operating within Canada's coastal and internal waterways are subject to a range of international and domestic regulatory controls with respect to pollution and discharges. Of particular note are the *Regulatory Controls For Cruise Vessel Waste For Vessels Operating In Canadian Waters* (Transport Canada 2008).

Transport Canada is also working with the cruise industry to develop voluntary guidelines to govern the industry's waste management practices. At the international level, commercial passenger vessels are subject to the International Maritime Organization (IMO) regulatory framework for pollution controls, which are covered under the International Convention for the Prevention of Pollution from Ships, or the MARPOL 73/78 convention, relating to oil, packaged goods, sewage, garbage, and air emissions.

The regulatory requirements for cruise ships operating in Canadian Territorial waters and ports have been compiled by Cruise Newfoundland and Labrador and are listed in Appendix B-4.

Canadian Coast Guard

The Canadian Coast Guard (CCG) is a special operating agency of Fisheries and Oceans Canada. The majority of staff and services are located at the headquarters of the CCG in St. John's. There is an office in Stephenville that covers CCG navigational and technical. The CCG operates a range of services and programs that are designed to provide marine safety, service, and protection of the marine environment. They are described in general terms as follows:

- **Aids to Navigation** —a network of navigational aids to ensure marine safety, protect the marine environment, and support maritime commerce.
- **Waterways Management** — helping managers to ensure that navigation channels are developed and used safely, efficiently, and in an environmentally-responsible manner.
- **Icebreaking** —helping vessels make their way more safely in ice-covered waters
- **Marine Communications and Traffic Services (MCTS)** — providing communications and traffic information services to mariners and to the public.
- **Search and Rescue (SAR)** —led by the Department of National Defence, with services 24 hours/7 days a week.
- **Environmental Response** —ensuring the cleanup of ship-sourced spills of oil and other pollutants into Canadian waters.

Aids to Navigation - the CCG operates lighthouses and a Differential Global Positioning System (DGPS) to correct for errors and enhance the accuracy of the Global Positioning System (GPS). Of the Province's four DGPS transmitting stations, one is located at Cape Ray.

Light stations - along the western Newfoundland and southern Labrador region now operate year-round, in part due to the efficiency of operations and maintenance associated with automated solar-powered lights and horns. Five light stations are still maintained by persons on site: Cape Ray, Cape Anguille, New Ferolle, Cape Norman, and Saddle Island. Fox Point light station near St. Anthony is also staffed on site. The Point Amour lighthouse at Point Amour in Southern Labrador has been automated since 1995 but a heritage centre is maintained by the Labrador Straits Historical Development Corporation and offers abundant information about the natural and cultural heritage of the site.

Notices to Mariners - the CCG also maintains a web site for Notices to Mariners (www.notmar.com), such as updated charts and publications required by the master, pilot, or person in charge of the navigation of a vessel. The service allows users to register the nautical charts they have in their possession and to be notified by e-mail when a Notice to Mariners is published.

Icebreaking - there are three or more ice breakers in use along western Newfoundland and southern Labrador, depending on seasonal timing and conditions of the ice. Three of the ships that have been used recently in waters of this region are the Henry Larson, the Anne Harvey, and the George W. Pearkes. Icebreakers are used in particular in the Humber Arm, the Strait of Belle Isle for ferry crossing, and as a support to ships engaged in the seal fishery. Through its Icebreaking Program, CCG monitors ice conditions and provides information to mariners on the best routes available through ice-covered waters.

Marine Communications and Traffic Services - there are five stations in the Province, two of which cover the western Newfoundland and southern Labrador region. The CCG's Port aux Basques station covers western Newfoundland to Cape Norman and the St. Anthony station covers the Strait of Belle Isle including Southern Labrador. The MCTS picks up distress calls, provides weather forecasts, and communicates safety notices to mariners. The MCTS maintains a series of communications towers along western Newfoundland.

The Canadian Coast Guard Marine Communications and Traffic Services program - is responsible for the Internet Innav website. It provides access to information on commercial marine traffic in selected Canadian waters. A subscription is required. While the subscription is free of charge, restrictions regarding qualifications apply.

Search and Rescue - the Department of National Defense operates the Joint Rescue Coordination Centre (JRCC) in Halifax that is responsible for the coordination of all Search and Rescue operations associated with aircraft and marine emergencies in eastern Canada. The Marine Rescue Sub-Centre in St. John's handles the search and rescue operations for Newfoundland and Labrador. Along the western Newfoundland and southern Labrador region, this would encompass a territory extending within 20-40 nautical miles, depending on the exact section of coast. Outside of this territory, either the JRCC or the Marine Rescue Sub-Centre for Quebec would have direct responsibility.

Lifeboat stations - for western Newfoundland and southern Labrador stations exist in Lark Harbour (Allen's Cove) and Port aux Choix. Two cutters operate along western Newfoundland: the CCGS Cape Norman, based in Lark Harbour, and the CCGS Cape Fox, based in Port au Choix.

The Canadian Coast Guard Auxiliary (CCGA) - this is a voluntary organization with vessels that aid in search and rescue incidents. The office for CCGA Newfoundland is in St. John's. In addition to the CCGA, the Canada National Search and Rescue Secretariat provides a web-based Directory of Canadian Search and Rescue Organizations that operate on a local scale (National Search and Rescue Secretariat 2008). Within the western Newfoundland region, seven local groups are listed (Table 30).

Table 30. Search and rescue organizations in western Newfoundland and southern Labrador coastal areas.

Name	Location	Services	Contact Number
Bay St. George/Port au Port			
Barchois Search and Rescue Team	Stephenville Crossing	Rappelling, traffic and crowd control, boat safety and boat inspections, and land and marine SAR.	(709) 646-3108
Stephenville Search and Rescue (Emergency Response Unit)	Stephenville	Forest searches and water rescues. Provides support for the RCMP when requested.	(709) 643-5990
Bay of Islands			
Bay of Islands Search and Rescue	Corner Brook	Forest, marine, and night searches, and survival techniques.	(709) 639-1637
Newfoundland Orienteering Association	Corner Brook		(709) 634-7826
Great Northern Peninsula			
Bonne Bay Search and Rescue Team	Rocky Harbour	Forest and ground searches. Provides support for the RCMP and Parks Canada when requested.	(709) 458-3407
Parks Canada - Gros Morne National Park	Rocky Harbour	Responsible for public safety and SAR activities on the sites. Forest searches, wilderness survival, mountain rescues, and rappelling.	(709) 458-2417
Parks Canada - L'Anse aux Meadows National Historic Site	Rocky Harbour	Responsible for public safety and SAR activities on the sites. Has an agreement with the RCMP and DFO to provide mutual assistance for SAR events.	(709) 623-2608

Note: Data were taken from the web site and not verified for current status.

Source: National Search and Rescue Secretariat 2008.

Environmental Response – the Environmental Response Division of the Canadian Coast Guard maintains an inventory of specialized oil spill response equipment and a team of skilled staff ready to respond to marine pollution incidents. Canadian law places the onus for responding to pollution incidents on the polluter; the Coast Guard's role is to monitor the polluter's efforts. Environment Canada oversees the impacts of oil spills on shorelines, wildlife, and the marine environment.

The International Ship and Port Facility Code (ISPS) came into effect in 2004. The ISPS establishes a framework for international cooperation to detect and take preventative measures against security incidents affecting ships and port facilities involved in international voyages and trade. Transport Canada decides the extent of application of the ISPS Code to those port facilities that occasionally may be required to serve ships arriving or departing on an international voyage.

2.4.6.3 Underground cables: Fibre optic cables run from Cape Ray, and from Searston Beach in the Codroy Valley, to Nova Scotia.

2.4.6.4 Wastewater treatment: The majority of communities of the western Newfoundland and southern Labrador region are serviced by municipal wastewater systems that capture and dispose of untreated wastewater into coastal receiving

waters (Table 31). While this method may have been the conventional approach throughout much of rural Newfoundland and Labrador for many years, new regulations that will come into force under the Fisheries Act will eventually require the larger municipalities to meet new standards for bacteriological and water treatment. The City of Corner Brook will be among the first communities in the Province to be required to meet these standards. Corner Brook and Stephenville are each working on plans to upgrade their systems.

Table 31. Sewage treatment and outfalls by western Newfoundland and southern Labrador coastal areas.

Coastal Area	Description/Percent	% of Population Served	# of Outfalls	Treatment
Bay St. George/Port au Port				
Codroy Valley area	Residents use private septic tanks and disposal fields.			
St. George's	Municipal System.	100	1	Untreated
Stephenville Crossing	A Municipal Wetlands Stewardship program in the centre of town converted a former cesspool into a productive wetland for waterfowl.	100	1	Untreated
Stephenville	Municipal System. A new municipal sewage system may be in progress as of 2008.	99	2	Untreated
Kippens	All residences have septic tanks.			
Cape St. George	All residences have septic tanks.			
Lourdes	All residences have septic tanks.			
Bay of Islands				
Gillams	Municipal System	100	1	Untreated
Corner Brook	Municipal System on the whole, with some exceptions (e.g., Crockers Road and Curling) where septic tanks are used.		11	1 with Secondary Treatment
Humber Arm South	Municipal System. Frenchman's Cove not serviced	52	5	Untreated
Hughes Brook	All residences have septic tanks.			
McIvers	Municipal System	34	1	Untreated
Cox's Cove	Municipal System	100	2	1 with Secondary Treatment
Lark Harbour	All residences have septic tanks and private outfalls, although an outfall for the school was installed by the provincial Department of Works, Services and Transportation.			
Meadows	Municipal System		3	Untreated
Irishtown-Summerside	Municipal System	70	2	Untreated, 1 with Grinding System
Mount Moriah	Municipal System.	90	3	Untreated
York Harbour	All residences have septic tanks.			
Great Northern Peninsula				
Trout River	Municipal System	100	1	Untreated
Woody Point, Bonne Bay	Municipal System	85	1	Untreated
Norris Point	Municipal System	100	1	Untreated
Rocky Harbour	Municipal System	99	6	Untreated

Daniel's Harbour	Municipal System	100	1	Untreated
Cow Head	Municipal System	100	3	Untreated
Parson's Pond	Municipal System	50	1	Untreated
Hawke's Bay	Municipal System	100	3	Untreated
Port Saunders	Municipal System	70	1	Untreated
St. Pauls	Municipal System	98	1	Untreated
Port au Choix	Municipal System	99	1	Untreated
Anchor Point	Municipal System	16	1	Untreated
Flower's Cove	All residences have septic tanks.			
Bird Cove	Municipal System	55	1	Untreated
Sally's Cove	All residences have septic tanks.			
Southern Labrador				
L'Anse-au-Clair	100% served by the municipal sewage system.	100	1	Untreated
Forteau	The majority of residents are hooked up to the municipal sewage system. Most residents of English Point, a section of Forteau, have their own septic systems. A peat/constructed wetland system serves the school and a peat system serves a few homes.		1	Untreated
L'Anse-au-Loup	100% served by the municipal sewage system.	100	1	Untreated
West St. Modeste	100% served by the municipal sewage system.	100	1	Untreated
Pinware	All residences have septic tanks; some local problems exist.			
Red Bay	Most residents of this community are served by a municipal system; however, sections of the community do not have municipal hook-up and some local problems exist. In 2005 the community sought financial assistance for alternative treatment to serve a section of the town.		1	Untreated

Sources: Department of Fisheries and Oceans 2005; NL Department of Environment and Conservation 2008b; Intervale Associates.

Many other small communities of western Newfoundland and southern Labrador, including those in the Codroy Valley and areas within the Northern Peninsula and Southern Labrador, are not serviced by municipal wastewater systems and in such cases the homes, businesses, and other facilities must rely upon on-site systems involving septic tanks and disposal fields. In addition to these communities, many of the larger or more prosperous communities include areas or neighbourhoods that are not linked to the town's municipal sewers (Table 31).

In 2006, the City of Corner Brook contracted BAE-Newplan Group to undertake a study of the existing and future sewage treatment needs of the community and alternatives for disposal into Humber Arm. In the report "Corner Brook Sewage Treatment Study", dated January 2006, BAE-Newplan Group discusses the alternative options for wastewater treatment in Corner Brook and makes recommendations for the best options for treatment. The preferred option recommended by BAE-Newplan Group would combine the 10 basins within the area into four groups of basins. Three of these groups would be treated with diffused outfalls, with septic tanks to reduce solids, while the fourth would have primary treatment before discharge (BAE-Newplan Group Limited, 2007a). Meanwhile, the

Town of Stephenville has been working on the completion of a solids composting facility.

Wastewater from the pulp and paper mill in Corner Brook is treated separately, by means of pH adjustment, coarse screening, and pumping to an activated sludge effluent treatment plant. The plant consists of a primary clarifier, an aeration basin, and a secondary clarifier. The majority of the settled biological solids are collected and returned to the aeration basin, while a small percentage is combined with the primary sludge and used as fuel for one of the boilers used in paper-making. The company also conducts Environmental Effects Monitoring studies to determine the effects, if any, of the mill's effluent on receiving waters of Humber Arm (Corner Brook Pulp and Paper Limited 2008).

In 2001 DFO, in partnership with the Newfoundland and Labrador Department of Environment, compiled a database of the Province's municipal sewage systems, including the locations of many of the outfall pipes servicing the hundreds of small communities along the coasts. During the period 2001-2004, researchers collected data by means of phone and fax surveys with municipalities, environmental approval permits, shoreline surveys in selected areas, and personal interviews with municipal officials (DFO 2005c). An updated database of select communities has been posted on the website of the Department of Environment and Conservation (2008). Information for the western Newfoundland and southern Labrador region has been combined from these databases and updated with additional information from Intervale Associates into Table 31.

New wastewater treatment systems need to be designed and the installation supervised by a professional engineer or certified technician, following the published guidelines for design of wastewater systems. Alternative systems such as constructed wetlands and peat filter systems usually require monitoring and the approval process must be coordinated by the appropriate government agency, depending on the scale of the project. For guidelines for the design of acceptable sewerage systems, consult Government of Newfoundland & Labrador: Guidelines for the Design, Construction, & Operation of Water & Sewerage Systems (2005), which is available on the web site of the Department of Environment and Conservation.

The sources and types of waste that are released into the marine environment are primarily degradable wastes such as domestic sewage but also include chemicals, detergents, pharmaceuticals, and industrial wastes from households, hospitals, institutions, and commercial businesses. Other degradable wastes include fish plant offal, seafood wastes, finfish aquaculture wastes such as excess feed and feces, and sawmill wastes. A study by Cull in 2000 examined the comparative levels of organic wastes that were released into the coastal waters of Newfoundland from four sources: domestic sewage, fish plant offal, aquaculture wastes, and sawmill wastes, using data from the 1990s (Cull 2000). For the Province as a whole during the period 1992-1996, fish plant offal was the largest source of coastal organic waste, followed by raw sewage and sawmill wastes. For the Northern Peninsula and West Coast region, fish plant offal was the largest contributor of organic wastes, followed by raw sewage. It is

to be expected that the proportion of organic wastes represented by these four sources may have shifted in recent years.

In 2003 AMEC Earth and Environmental Limited produced a report to the National Programme of Action, Atlantic Regional Team, Environment Canada on the management of wastes from the seafood processing industry in the four Atlantic provinces (AMEC 2003).

The ACAP Humber Environmental Association commissioned several monitoring and overview studies of water quality in the Humber Arm during the years 1999-2002. The results were published in a series of reports that are available in the ACAP Humber Arm library resource centre on the Campus of Sir Wilfred Grenfell College. A small sample of the reports is listed below:

- Rural Wastewater Survey Program: A Report for Communities of the Bay of Islands. 1999. ACAP Humber Arm Environmental Association Inc. Corner Brook.
- Wastewater Treatment in the Humber Arm – Bay of Islands. 1999. Higgins, Stephanie. Corner Brook.
- Sewage Effluent Characterization Study: Humber Arm – Bay of Islands: Final Report. 1996. McNeil, Terry. Humber Arm Environmental Association Inc. and Department of Fisheries and Oceans. Corner Brook.
- Evaluation of Seabed Animal Community in Humber Arm, Newfoundland in Relation to Sediments & Contaminants. 2002. Stewart, P.L., Kendrick, P.A. and Levy, H. Windsor, Nova Scotia: EnviroSphere Consultants Limited.

Currently the ACAP Humber Arm Environmental Association, in conjunction with the Conservation Corps of Newfoundland and Labrador and other partners, have teamed up to conduct an education and outreach program for citizens of the Humber Arm on basic information about wastewater treatment and septic tank maintenance. Information brochures are available through the ACAP Humber Arm office.

2.4.6.5 Solid waste disposal and management: More than 400,000 tonnes of solid waste is generated in Newfoundland and Labrador each year, equalling approximately two kilograms per person per day. Most of this waste is classified as paper or organic—two categories that can be diverted from the waste stream, thereby significantly reducing the total amount of waste disposed into landfills. (Newfoundland and Labrador Waste Management Strategy 2002).

There are currently seven incinerator sites and 13 landfill sites in western Newfoundland and southern Labrador (Table 32).

Table 32. Landfill and/or incinerator sites in western Newfoundland and southern Labrador coastal areas, 2007.

Coastal Area	Incinerator Sites	Landfill Sites
Bay St. George/Port au Port	Codroy	Bay St. George
	Lourdes	Fox Island River
	St. George's	South Branch
	Stephenville	
Bay of Islands		Corner Brook- Wildcove
		McIvers
Great Northern Peninsula	Castor River	Port aux Choix
	Daniel's Harbour (now closed)	Rocky Harbour
	Lourdes	St. Barbe
		St. Anthony
		Strait of Belle Isle
		Trout River
Southern Labrador		Red Bay
		Straits (Serving the communities from L'Anse au Clair to and including Pinware)

Source: Newfoundland and Labrador Department of Municipal Affairs 2007.

A waste audit conducted at the Labrador Straits regional dump by the Quebec-Labrador Foundation in the late 1990s found paper and organics to represent the highest percentage of total solid waste (Quebec-Labrador Foundation 1998). Although no information was available on the category breakdown of solid waste for western Newfoundland communities, it might be assumed that the proportional contents of solid waste for most communities would not be significantly different.

The Government of Newfoundland and Labrador published a solid waste management strategy in 2002. The strategy puts forward a regional approach and provides a framework for creating formal partnerships among incorporated communities, Local Service Districts, and unincorporated areas. Under the plan, there will be three "super-dumps" on the island. The Wild Cove site near Corner Brook is under discussion as a possible location for one of the three regional landfills. The strategy contains the following objectives:

1. divert 50% of the materials currently going to disposal by 2010;
2. reduce the number of waste disposal sites by 80%;
3. eliminate open burning at disposal sites by 2005 and phase out the use of incinerators by 2008;
4. phase out use of unlined landfill sites by 2010; and
5. full Province-wide modern waste management by 2010.

The planned closing of all tepee incinerators is going ahead as scheduled, with the deadline for closing being the end of 2008. In the western Newfoundland and southern Labrador region tepee incinerators are closing in Stephenville, Codroy Valley, Lourdes, and the Strait of Belle Isle. Some of the communities with tepee incinerators have no back-up plan for what to do with the waste once the incinerator closes. Others, like Port aux Basques, may be receiving waste from other communities in southwestern Newfoundland, leaving the question of alternatives an even greater challenge.

Planning for the western regional "super-dump" is being reactivated after many months of inactivity. The Waste Management Committee for western Newfoundland has been reconstituted. The Wild Cove site near Corner Brook is being proposed as a likely candidate for the western regional landfill site that will serve western Newfoundland communities. In general, the implementation of the Province's waste management strategy along the western Newfoundland and southern Labrador region is perceived as lagging behind that for the Avalon Peninsula and Central Newfoundland, with Southern Labrador not having reached even the preliminary stages of planning.

For Local Service Districts like the Codroy Valley, waste management planning has been organized for many years through a regional committee. Across western Newfoundland and southern Labrador, citizens are realizing the dramatic changes that the regionalization of solid waste collection will bring to their communities.

3.0 ECONOMIC FEATURES AND ACTIVITIES

3.1 WORKFORCE, INCOME, AND INDUSTRIES

3.1.1 Workforce

The three characteristics of work force activity—participation rate, employment rate, and unemployment rate—for the western Newfoundland and southern Labrador region showed steady improvement but were lower than the provincial and Canadian rates for the ten year period 1996-2006 (Table 33).

There were striking differences among the coastal areas. The participation rate, defined as the percent of the population age 15 and older that is in the workforce, was lower overall than the provincial and Canadian rates in 2006, but higher in the Southern Labrador coastal area than the provincial average (Table 33).

The employment rate, defined as the percent employed within the workforce, has been rising over the ten year period (Table 33). Although the region as a whole lagged behind the provincial employment rate, the Bay of Islands coastal area was the highest of the four coastal areas and exceeded the provincial rate during the ten year period.

Unemployment remains a problem, especially for the two northernmost coastal areas (Great Northern Peninsula and Southern Labrador), both of which had unemployment rates greater than 30% in 2006 (Table 33). Southern Labrador experienced an unemployment rate of over 50.6% in 1996 but gradually improved to 32.6% in 2006. The total unemployment rate for the region of 24.1% in 2006 was higher than the provincial rate of 18.6% and nearly four times the Canadian rate of 6.6%.

The factors that contribute to the measurements and trends for labour force are complex and involve an understanding of the shifting industry arena, the seasonal nature of work, and the migration patterns of workers. One indicator of concern, however, is the widening gap in the participation rate as compared with Canada, particularly in the Bay St. George/Port au Port coastal area, where a higher percentage of the population may be represented by people who are retired and are therefore not part of the workforce.

Table 33. Workforce activity for individuals 15 years and older for western Newfoundland and southern Labrador coastal areas, 1996 – 2006.

Workforce Characteristics		Bay St. George/Port au Port	Bay of Islands	Great Northern Peninsula	Southern Labrador	western Newfoundland and southern Labrador Region	Newfoundland and Labrador	Canada
2006	Population (15+)	17,910	24,145	10,405	1,540	54,000	427,245	26,033,060
	Labour Force (15+)	8,455	13,655	6,185	900	29,195	248,680	17,146,135
	Participation Rate	47.6	57.4	58.5	59.2	54.4	58.9	66.8
	Employment Rate	74.3	83.8	62.5	67.4	75.9	81.4	93.4
	Unemployment Rate	25.7	16.3	37.5	32.6	24.1	18.6	6.6
2001	Population (15+)	17,970	23,280	11,120	1,640	54,010	419,015	23,901,360
	Labour Force (15+)	8,465	13,320	6,455	935	29,175	246,065	15,872,070
	Participation Rate	47.4	57.3	58.1	59.0	54.4	57.6	66.4
	Employment Rate	71.7	80.6	57.4	58.1	72.2	78.2	92.6
	Unemployment Rate	28.3	19.3	42.5	41.9	27.8	21.8	7.4
1996	Population (15+)	19,235	24,890	12,110	1,600	57,835	437,340	22,628,925
	Labour Force (15+)	9,695	14,165	6,950	1,030	31,840	241,500	14,812,700
	Participation Rate	50.2	57.0	57.9	64.9	55.2	56.3	65.5
	Employment Rate	68.0	80.0	57.2	50.6	70.7	74.9	89.9
	Unemployment Rate	32.3	19.8	42.8	50.6	29.3	25.1	10.1

Source: Statistics Canada, Census 2001 - 2006.

3.1.2 Income

Data for income level and composition of income from Statistics Canada were available by census subdivisions, but due to the nature of the information it was not possible to group the data by coastal areas. However, income information organized by Regional Economic Development Zones was available for 2000 and 2005 from Community Accounts (Table 34).

Personal income per capita increased for all Regional Economic Development Zones during the period 2000 to 2005 (Table 34). Average income for individuals is below provincial and Canadian levels as demonstrated by percentage of provincial and Canadian index.

The self-reliance ratio, which is the ratio of market income (as opposed to government transfers) to total personal income, improved in all zones except Zone 5 (Labrador Straits) and Zone 6 (tip of Northern Peninsula) from 2000 to 2005. There was a slight drop in three out of five Zones in the reliance on income support.

Table 34. Income level indicators for Regional Economic Development Zones within western Newfoundland and southern Labrador.

	Zone 10 Port aux Basques / Doyles / Rose Blanche			Zone 9 Stephenville / Port au Port / Burgeo			Zone 8 Deer Lake / Humber Area / Corner Brook		
	2005	2000	% Change	2005	2000	% Change	2005	2000	% Change
Taxfilers	7,430	7,590	-2	17,780	18,130	-2	32,530	31,350	4
Total personal income (\$,000)	171,532	145,889	18	397,123	334,811	19	873,264	692,795	26
Self-reliance ratio	69.8%	69.7%		67.8%	68.3%		77.9%	77.1%	
Personal income per capita	\$18,500	\$14,600	27	\$17,400	\$13,500	29	\$21,200	\$16,600	28
Provincial index (%)	85.8	85.7		80.8	79.6		98	97.5	
Canadian index (%)	67.6	64.5		63.7	59.9		77.3	73.4	
Number Receiving Income Support	1105	1690	-35	5245	6705	-22	4605	5710	-19
Income Support Assistance Incidence	11.9	16.4		23	27.1		11.2	13.7	
	Zone 7 Gros Morne Area, Viking Trail North to and including Plum Point			Zone 6 Viking Trail, St. Anthony South West to Plum Point, East to Roddickton/Englee			Zone 5 Labrador Straits (L'Anse au Clair to Red Bay)		
	2005	2000	% Change	2005	2000	% Change	2005	2000	% Change
Taxfilers	7,590	7,730	-2	7,210	7,800	-8	1,460	1,510	-3
Total personal income (\$,000)	162,482	135,428	20	165,830	149,380	11	35,647	30,450	17
Self-reliance ratio	61.8%	61.3%		67.1%	69.4%		70.4%	72.0%	
Personal income per capita	\$17,300	\$13,200	31	\$18,500	\$14,500	28	\$19,200	\$14,900	29
Provincial index (%)	80.2	77.6		85.5	85		88.8	87.3	
Canadian index (%)	63.2	58.4		67.4	64		70	65.7	
Number Receiving Income Support	910	1495	-39	615	1100	-44	75	145	-48
Income Support Assistance Incidence	9.7	14.6		6.8	10.6		4	7.1	

Source: Community Accounts 2008.

3.1.3 Structure of work force by industries

Information on industry of employment from Community Information Database shows that occupations unique to primary industry, such as fisheries and forestry, employed 10% of the active work force in 2001. This was higher than the provincial percentage (8%) and more than twice that of Canada (4%) (Table 35). The largest employment sector was sales and service (28%), which was above the provincial and Canadian percentages. The proportion of workers engaged in trade, transport, and equipment

operating matches the provincial rate and exceeds that for Canada. This sector likely includes mill workers, road crews, and dockside employees associated with the ferry terminals, all of which are characteristic of the western Newfoundland and southern Labrador region.

Table 35. Industry of employment in western Newfoundland and southern Labrador coastal areas, 1996 – 2001.

Industry (Percent)		Bay St. George/Port au Port	Bay of Islands	Great Northern Peninsula	Southern Labrador	western Newfoundland and southern Labrador Region	Newfoundland and Labrador	Canada
		(%)	(%)	(%)	(%)	(%)	(%)	(%)
2001	Management	6	9	6	9	7	8	10
	Business, finance and administrative	11	14	8	10	12	14	18
	Natural and applied sciences and related	3	4	3	3	4	5	6
	Health	5	9	3	3	6	6	5
	Occupations in social science, education, government service and religion	9	7	5	3	7	8	8
	Occupations in art, culture, recreation and sport	2	2	1	3	2	2	3
	Sales and service	32	29	22	21	28	26	24
	Trades, transport and equipment operators and related occupations	17	16	19	22	17	17	15
	Occupations unique to primary industry	10	4	23	19	10	8	4
	Occupations unique to processing, manufacturing and utilities	5	6	12	12	7	7	7
1996	Management	6	7	4	8	6	7	9
	Business, finance and administrative	12	15	8	9	12	15	19
	Natural and applied sciences and related	3	3	3	6	3	4	5
	Health	5	6	3	6	5	5	5
	Occupations in social science, education, government service and religion	9	7	6	13	8	8	7
	Occupations in art, culture, recreation and sport	2	2	1	3	2	2	3
	Sales and service	26	31	25	22	28	28	26
	Trades, transport and equipment operators and related occupations	21	17	15	19	18	17	14
	Occupations unique to primary industry	11	4	28	10	11	7	5
	Occupations unique to processing, manufacturing and utilities	6	8	8	12	8	6	8

Source: Community Information Database 2008.

Many primary resource sector industries provide mostly seasonal work and lower income than would be experienced in the knowledge, engineering, governmental, and technology sectors. This may help explain the lower average income and higher dependence on transfer payments within the region as compared to Canada as a whole. The increase in global markets is also affecting the fisheries, forestry, and agriculture industries of the region quite dramatically.

Overall, the picture emerging from the combination of economic and socio-demographic data presented in this report is of a coastal region that is experiencing a lower level of socio-economic prosperity than the rest of Canada. The decline in population is a result not only of low birth rate but of out-migration that is driven in part

by opportunities for employment and higher wages elsewhere. These trends are reportedly expected in rural, resource-based economies following a severe decline in industry activity for the resource sectors. Upcoming sections will describe new industry sectors investing in the region, whose influences may lead to new employment opportunities and the possible revitalization of certain communities. In addition, the clustering of educational, research, and tourism industries in the Bay of Islands region combined with the growth in air transportation through Deer Lake is attracting many people from outside the Province to the Corner Brook area. The emphasis on natural and cultural heritage and the growing interest in Aboriginal culture are significant assets that will define the coastal region as an attractive, culturally diverse, and ecologically defined region of Canada.

3.2 FEDERAL AND PROVINCIAL INVESTMENT

Federal and provincial investment in the region can be an important indicator for integrated management planning.

A major contributor to projects in the region is the Atlantic Canada Opportunities Agency (ACOA). Table 36 summarizes the financial assistance, in thousands of dollars, granted or loaned by ACOA to projects within each of the coastal areas during the period 2003-2007. The Great Northern Peninsula coastal area received the greatest amounts overall and specifically in contributions and repayable contributions. Southern Labrador received the greatest amounts in grants. It is difficult to summarize the trends over time because certain projects that have a limited time period for funding often capture a greater proportion of dollars, and because amounts granted to a geographic area can vary dramatically from year to year. However, the scale of reporting by ACOA enables the configuration of data by coastal area rather than by Regional Economic Development Zone and, therefore, the data offer a more accurate assessment of financial assistance to communities at the coastal area level.

Table 36. Total financial assistance (in thousands of dollars) by ACOA and total cost of projects funded in western Newfoundland and southern Labrador coastal areas, 2003 – 2007.

Coastal Area	Amount	Contributions	Grants	Repayable Contributions	Provisionally Repayable Contrib.
Bay St. George/Port au Port	ACOA Assistance	4,920	55	2,800	260
	Total Cost of Projects	9,348	90	8,223	347
Bay of Islands	ACOA Assistance	8,328	65	2,013	2,780
	Total Cost of Projects	19,234	516	6,091	4,500
Great Northern Peninsula	ACOA Assistance	23,041	45	3,862	0
	Total Cost of Projects	36,707	228	9,546	0
Southern Labrador	ACOA Assistance	4,828	84	813	0
	Total Cost of Projects	10,259	331	2,388	0
Total WNSL Region	ACOA Assistance	41,117	250	9,488	3,040
	Total Cost of Projects	75,548	1,164	26,247	4,847

Notes: Repayable Contribution - a loan that is fully repayable, regardless of project outcomes.

Generally, these loans are non-interest bearing and unsecured. Provisionally Repayable Contribution - a contribution where the obligation to repay (partially or fully) is contingent upon certain conditions or milestones being met. Grant - an unconditional transfer payment to an individual or organization that meets certain eligibility requirements. Contribution - a conditional transfer payment to an individual or organization to reimburse specific expenditures. The contribution agreement is subject to an audit.

WNSL=western Newfoundland and southern Labrador region.

Source: ACOA's Project Information Site, <http://pub.acoa-apeca.gc.ca/atip/e/content/> 2008.

The provincial government, through the Department of Innovation, Trade and Rural Development, invested more heavily in the western Newfoundland (Western) and Labrador regions of the Province during the 2006-2007 period as compared with 2005-2006 (Table 37). The geographic scope of these regions, however, extend beyond the western Newfoundland and southern Labrador region and include the Humber Valley, St. Anthony, Port aux Basques, and all of Labrador. The total provincial investment through the Small and Medium-Sized Enterprise Fund for 2006-2007 was over \$7 million for the Western Region and nearly \$60,000 for Zone 5 (Southern Labrador) (Table 33).

Table 37. Total provincial government investment in regional and sectoral initiatives in western Newfoundland and Labrador, 2005-2006 and 2006-2007.

Region	Provincial Investment (\$)	Leveraged Investment (\$)	Total Project Value (\$)	Number of Initiatives
2006-2007				
Western	2,268,246	4,679,921	7,252,117	35
Labrador	521,379	2,440,466	2,964,057	17
2005-2006				
Western	1,444,834	5,010,860	6,607,457	20
Labrador	428,119	1,516,006	1,988,960	11

Note: Regions defined by NL Department of Innovation, Trade and Rural Development.

Source: Innovation, Trade and Rural Development, Annual Report 2006-2007.

Table 38. Total Provincial government investment in business enterprises in western Newfoundland and Zone 5, 2006–2007.

Program	Western (\$)	Zone 5 (\$)	Total Investment in WNSL Region (\$)
Business and Market Development Program	2,309,544	25,000	2,399,157
Small and Medium-Sized Enterprise Fund	7,068,146	59,377	7,702,146

Note: WNSL=western Newfoundland and southern Labrador.

Source: Innovation, Trade and Rural Development, Annual Report 2006-2007.

3.3 HOUSING DEVELOPMENT

Housing starts data from the Canadian Mortgage and Housing Corporation (CMHC) were available for the Province as a whole and for Corner Brook. Housing starts are defined as the beginning of construction work on a building. In Corner Brook in 2007 there was a slight decline in the total number of housing starts as compared with 2006 (Table 39). The situation improved by the end of 2008, when housing starts increased slightly as compared with 2007. By comparison, St. John's finished 2008 with a 25.9% increase—the highest level of growth among urban centres in the Atlantic region—while Gander, located in central Newfoundland, finished with a decrease of more than 100% (Canadian Mortgage and Housing Corporation 2008a).

Table 39. Housing starts in Corner Brook, 2006-2008.

Year	Apartment & Other	Semi-detached	Row	Single-detached	Total
Corner Brook					
2008		4		69	73
2007	8	0	0	64	72
2006	14	0	0	67	81

Source: Canadian Mortgage and Housing Corporation, 2008 & 2009.

Housing market outlooks for Newfoundland and Labrador tend to be reflective of data emanating from the more densely populated area of St. John's. Thus caution is necessary before applying general statements about trends to either Corner Brook or the western Newfoundland and southern Labrador region as a whole. With that in mind, The CMHC forecasts that the Province can be expected to face challenges in 2009 with respect to housing starts, with the possibility of slight positive growth in 2010 (Canadian Mortgage and Housing Corporation 2009).

The fall 2008 survey of rental accommodations for private rent structures containing three or more units, which is conducted annually by the CMHC, showed that Corner Brook experienced an average rental rate for two-bedroom rents of \$506, a 3.4 % increase over the previous year. By comparison, St. John's experienced an average rental rate of \$630, a 3.8 % increase. The Province as a whole (as measured by data from urban centres with populations of 10,000 or more) experienced an average rental rate of \$576, a 3.2 % increase. The vacancy rate for Corner Brook increased from 0.6 to 0.9 %, the lowest of all urban centres that were measured. The vacancy rate for St. John's decreased from 3.5 to 1.5 %. The Province as a whole

experienced a decrease in the average vacancy rate from 2.8 to 1.6 % (Canadian Mortgage and Housing Corporation 2008b).

Just outside the boundaries of the western Newfoundland and southern Labrador region, between Corner Brook and Deer Lake, Newfoundland, lies the Humber Valley Resort, a luxury resort containing homes, rental properties, a restaurant, and golf course. The resort caters to a European market seeking second home properties within easy travel distance by charter flights from the United Kingdom. The construction of homes and serving the accompanying amenities brought an economic boost to the region during the operation's first years of development, but the economic gains were met later with challenging times. In September of 2008, NV Newfound, owner of the resort, filed for protection against creditors under the Canadian Companies Creditors' Arrangements Act, and was planning to file for bankruptcy protection in December 2008 (Humber Valley Resort 2008, and Canadian Broadcasting Corporation News, December 3, 2008).

3.4 INDUSTRIAL AND OTHER ACTIVITIES

3.4.1 Commercial fishing and sealing

Commercial fishing has long been a major focus of economic activity for the western Newfoundland and southern Labrador region and today it remains the most important economic base for many of the small communities. The number of active fishers in the region has remained relatively stable from 2000 to 2007 (Table 40). Small annual fluctuations could represent combining of licences, fishery closures, or people leaving the Province.

Table 40. Number of active fishers western Newfoundland and southern Labrador coastal areas, 2000-2007.

Coastal Area	2007	2006	2005	2004	2003	2002	2001	2000
Bay St. George/Port au Port	225	224	229	224	215	214	229	229
Bay of Isles	111	106	108	105	104	104	109	119
Great Northern Peninsula	683	687	738	783	720	679	728	685
Southern Labrador	62	98	82	111	97	64	56	63
Total Region	1,081	1,115	1,157	1,223	1,136	1,061	1,122	1,096

Source: Fisheries and Oceans Canada 2009.

3.4.1.1 Species harvested: A total of 54 groundfish, invertebrates, pelagic and seal species and products are harvested in marine waters of the western Newfoundland and southern Labrador (Table 41).

Table 41. Marine fish, invertebrate, and seal species commercially harvested in waters in western Newfoundland and southern Labrador coastal areas, 2001-2006.

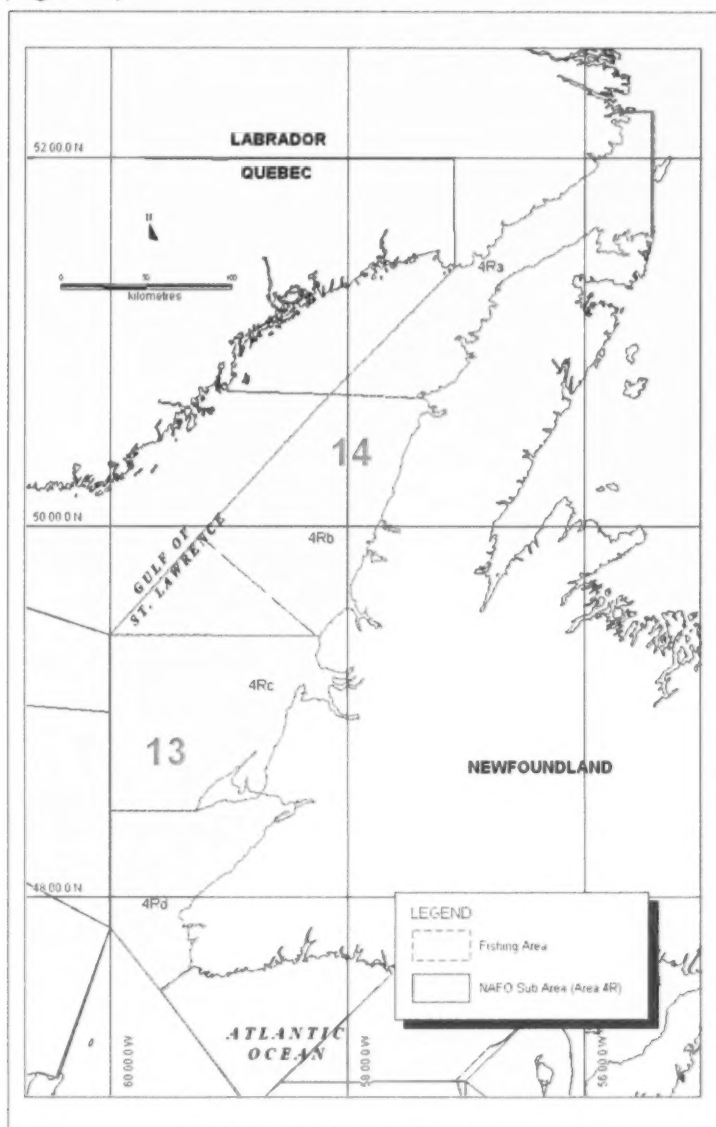
Category	Species Name	Coastal Area			
		Bay St. George/Port au Port	Bay of Islands	Great Northern Peninsula	Southern Labrador
Groundfish	American plaice	✓	✓	✓	✓
	Catfish	✓	✓	✓	✓

	Cod, Atlantic	✓	✓	✓	✓
	Cod, rock				✓
	Cusk	✓	✓		
	Dogfish			✓	
	Grenadier, rough-head			✓	
	Greysole/witch	✓	✓	✓	
	Groundfish, unspecified			✓	
	Haddock	✓	✓	✓	
	Hagfish/slime eel	✓			✓
	Hake, white	✓	✓	✓	✓
	Halibut	✓	✓	✓	✓
	Monkfish (Am angler)	✓	✓	✓	✓
	Ocean pout/feel pout			✓	
	Pollock	✓	✓	✓	
	Redfish	✓	✓	✓	✓
	Roe, lumpfish	✓	✓	✓	✓
	Sandeels/sandlance		✓		
	Skate	✓	✓	✓	✓
	Turbot/Greenland halibut	✓	✓	✓	✓
	Winter flounder	✓	✓	✓	
	Wolffish, Northern	✓		✓	✓
	Wolffish, Spotted	✓		✓	✓
	Wolffish, Striped/ Atlantic	✓	✓	✓	
	Yellowtail flounder	✓	✓	✓	
Invertebrates	Crab, porcupine			✓	
	Crab, Queen/Snow	✓	✓	✓	✓
	Crab, rock	✓		✓	✓
	Crab, spider/toad	✓	✓	✓	✓
	Crab, stone/king			✓	
	Lobster	✓	✓	✓	
	Scallop, Iceland	✓	✓	✓	✓
	Sea Urchins		✓		
	Shrimp, Pandalus Borealis	✓	✓	✓	✓
	Squid, Illex			✓	✓
	Whelks	✓		✓	✓
Pelagics	Alewife/gaspereau			✓	
	Capelin	✓	✓	✓	✓
	Eels	✓		✓	
	Fins, shark	✓			
	Herring, Atlantic	✓	✓	✓	✓
	Mackerel	✓	✓	✓	✓
	Shark, blue		✓		
	Shark, mako	✓	✓	✓	✓
	Shark, porbeagle/mackerel		✓		
	Shark, unspecified	✓		✓	✓
	Sturgeon	✓			
Seals	Seal skins, bearded (no.)			✓	
	Seal skins, grey	✓			
	Seal skins, harbour (no.)	✓		✓	
	Seal skins, harp, beater (no.)	✓	✓	✓	✓
	Seal skins, hood, old (no.)			✓	
	Seal skins, ringed/jar (no.)		✓	✓	✓
	Grand Total	38	32	44	28

Source: Extracted from landings data, DFO 2008b.

3.4.1.2 Licences held: The number and variety of licences held by fishers within each of the coastal areas is an indication of the importance of commercial fisheries to the economy of the western Newfoundland and southern Labrador region.

Information on the number of fishing licences in the region are reported by Fishing Area and grouped according to vessel length and in some cases by fisheries. The boundaries of the Bay St. George/Port au Port and the Bay of Islands coastal areas combined are equivalent to Fishing Area 13 (Cape Ray to Cape St. Gregory) and the boundaries of the Great Northern Peninsula and the Southern Labrador coastal areas combined are equivalent to Fishing Area 14 (Cape St. Gregory to Cape St. Charles) (Figure 8).



Source: DFO 2009.

Figure 8. Fishing Areas of western Newfoundland and southern Labrador.

A total of 1,010 enterprises for core, non-core, and recreational fish harvesters in the region were licensed in 2006 (Table 42). More than twice as many were listed for Fishing Area 14 as compared with Fishing Area 13. The coastal area with the greatest number of enterprises registered is the Great Northern Peninsula (FFAW, Corner Brook, NL, Jason Spingle, pers. comm., 2009). The largest number of licensed enterprises were for the <25' and 25-34' fleets, which suggests the importance of the inshore fishery for the western Newfoundland and southern Labrador region.

Table 42. Commercial and recreational enterprises by vessel length and fishing area in western Newfoundland and southern Labrador as of December 31, 2006.

Fishing Area	Vessel Length (feet)					Total
	<25	25-34	35-44	45-54	55-64	
13	223	71	9	10	3	316
14	239	345	36	18	56	694
Total	462	416	45	28	59	1,010

Note: Fishing Area 13 consists of Cape Ray to Cape St. Gregory, while Fishing Area 14 consists of Cape St. Gregory to Cape St. Charles.

Source: Department of Fisheries & Oceans, Statistical Profile Number of Fishing Licences 2006.

The fishery with the greatest number of licences held by fishers with home ports in the Fishing Areas 13 and 14 is seals followed by groundfish, lobster, bait, herring and mackerel (Table 43). Most of these are in Fishing Area 14. Fixed gear is dominant over mobile gear in all categories.

Table 43. Number of active licences for each fishery held by inshore commercial and recreational fish harvesters in Fishing Areas 13-14 as of December 31, 2006.

Species	Fishing Area		Total
	13	14	
Bait	297	455	752
Capelin Fixed Gear (FG)	17	230	247
Capelin Mobile Gear (MG)	8	4	12
Capelin Exploratory	4	4	8
Eel	24	23	47
Groundfish Fixed Gear	232	574	806
Groundfish Mobile Gear	3	59	62
Herring Fixed Gear	186	488	674
Herring Mobile Gear	10	5	15
Lobster	301	458	759
Mackerel Dual FG & MG	2	1	3
Mackerel FG	152	388	540
Mackerel MG	8	4	12
Mackerel MG - Exploratory	4	4	8
Salmon (Atlantic)14	0	2	2
Scallop	43	85	128
Scallop - Recreational	96	79	175
Seal - Assistant	56	856	912
Seal - Personal Use	67	16	83
Seal - Professional	247	1438	1685
Seal - Temporary Assistant	7	71	78
Shark - Recreational	0	5	5
Shrimp - Gulf	0	46	46
Shrimp SFA 06 - Temporary	0	63	63
Shrimp SFA 08/Gulf - Temporary	0	11	11
Snow Crab - Commercial	11	6	17
Snow Crab - Inshore	195	122	317
Snow Crab - Inshore (Formerly Experimental)	4	9	13
Snow Crab - Inshore (Formerly Exploratory)	12	32	44
Squid	60	40	100
Whelk	34	130	164
Total	2,080	5,708	7,788

Note: Fishing Area 13 consists of Cape Ray to Cape St. Gregory, while Fishing Area 14 consists of Cape St. Gregory to Cape St. Charles.

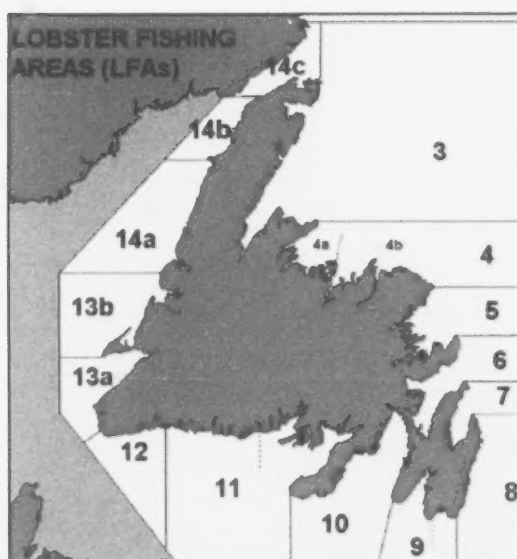
Source: DFO, Statistical Profile Number of Fishing Licences 2006.

There are a total of 761 lobster licences in western Newfoundland and southern Labrador as of December 31, 2006 (Table 44). Lobster is an important industry in the region, with the greatest number of licences held in Lobster Fishing Area 14B (Figure 9) or St. John's Bay, of the Great Northern Peninsula coastal area (Table 44).

Table 44. Commercial lobster licences held in western Newfoundland and southern Labrador as of December 31, 2006.

Lobster Fishing Area	Total
13A	148
13B	170
Fishing Area 13 Total	318
14A	203
14B	235
14C	5
Fishing Area 14 Total	443
Grand Total	761

Source: DFO, Statistical Profile Number of Fishing Licences 2006.



Source: DFO 2009.

Figure 9. Lobster Fishing Areas for Newfoundland and Labrador waters.

The number of licence holders for groundfish in western Newfoundland and southern Labrador has declined from 379 in 1995 to 270 in 2006, with a significant adjustment having occurred in 2001 with the cod moratorium (Table 45). It is important to note that in spite of the number of licence holders having declined since the 1990s, the number of active fishers during the period 2000-2007 has remained relatively stable (Table 40).

Table 45. Number of groundfish licences in Fishing Areas of western Newfoundland and southern Labrador, 1995-1996 and 2001-2006.

Fishing Area	2006	2005	2004	2003	2002	2001	1996	1995
13	103	102	101	99	99	99	150	148
14	167	168	169	170	170	170	230	231
Total Region	270	270	270	269	269	269	380	379

Source: DFO, Statistical Profile Number of Fishing Licences 2006.

Groundfish licence holders in the NAFO Division 4R use gillnet, traps, and longline gear and are permitted to fish in a wide range of quota areas extending from the Labrador coast to the Gulf of St. Lawrence and portions of the South Coast of Newfoundland (Table 46). Location of Quota Areas (NAFO Divisions) is shown in Figure 10.

Table 46. Commercial groundfish licences <65' in western Newfoundland and southern Labrador (4R) permitted to fish quotas in other NAFO Divisions, as of December 31, 2006.

NAFO Region	Gear Description	Quota Area	Total
4R	GILLNET & LONGLINE	2J,3PN,4RST	153
		3PS,3PN,4RST	1
	GILLNET,1 TRAP,LONGLINE	2J,3PN,4RST	92
		2J,3PN,4RST,3K	1
	GILLNET,2 TRAPS,LONGLINE	2J,3PN,4RST	64
	GILLNET,3 TRAPS,LONGLINE	2J,3PN,4RST	9
	GILLNET,4 TRAPS,LONGLINE	2J,3PN,4RST	4
	GILLNET & LONGLINE	2J,3PN,4RST	347
	GILLNET,1 TRAP,LONGLINE	2J,3PN,4RST	88
	GILLNET,2 TRAPS,LONGLINE	2J,3PN,4RST	46
	GILLNET,3 TRAPS,LONGLINE	2J,3PN,4RST	2
	GILLNET,4 TRAPS,LONGLINE	2J,3PN,4RST	1
	GILLNET,5 TRAPS,LONGLINE	2J,3PN,4RST	1
	OTTER TRAWL	2J,3PN,4RST	58
		3PS,3PN,4RST	3
		3PS,3PN,4RST	1
Total		871	

Source: DFO, Statistical Profile Number of Fishing Licences 2006.

3.4.1.3 Landed weight and value: Weight (metric tonnes) and value (Canadian dollars) of annual landings for crustaceans, groundfish, molluscs, pelagics, miscellaneous (seal products other than pelts, roe, clams, shark fins and groundfish heads), and seals in the western Newfoundland and southern Labrador region for the period 2000-2007 are given in Tables 47-48 and Figures 10-12. For the region as a whole, pelagics represented the greatest amount of landed weight during all years and were especially strong between 2003 and 2007. Crustaceans represented the greatest amount of landed value during all years even though they experienced a decline between 2002 and 2006 (Figure 10). A summary by coastal area follows:

Bay St. George/Port au Port

This coastal area had the third highest proportion of total overall landed weight (25%) for all categories of fisheries combined but the second highest proportion of total overall landed value (23%) for 2000-2007 (Tables 47, 48). Within the coastal area, pelagics represented the highest proportion of landed weight (85%) among fisheries, while crustaceans represented the highest proportion of landed value (62%) (Figures 11, 12).

Bay of Islands

This coastal area had the second highest proportion of total overall landed weight (31%) for all categories of fisheries combined but the third highest proportion of total overall landed value (15%) for 2000-2007 (Tables 47, 48). Landed weights and value for pelagics were the highest compared to other coastal areas. Within the coastal area, pelagics represented the highest proportion of landed weight (95%) among fisheries and the highest proportion of landed value (50%) but only by a 4% margin over crustaceans (Figures 11, 12).

Great Northern Peninsula

This coastal area had the highest proportion of total overall landed weight (40%) for all categories of fisheries combined for 2000-2007 (Table 47). Landed weights were highest for crustaceans, groundfish, molluscs, and miscellaneous compared to other coastal areas. The Great Northern Peninsula also had the highest proportion of total overall landed value (55%) for all categories of fisheries combined for 2000-2007 (Table 48). Landed values were highest for crustaceans, groundfish, molluscs, and miscellaneous compared to other coastal areas. It also had the highest proportion of landed value for seals (89%) (Table 48). Within the coastal area, crustaceans represented the highest proportion of both landed weight (49%) and landed value (64%) among fisheries (Figures 11, 12).

Southern Labrador

This coastal area had the lowest proportion of total overall landed weight (4%) and landed value (7%) for all categories of fisheries combined for 2000-2007 (Tables 47, 48). It had the second highest proportion of landed weight and value of groundfish and of miscellaneous. Within the coastal area, groundfish represented the highest proportion of both landed weight (50%) and landed value (68%) among fisheries (Figures 11, 12).

Table 47. Commercial fishery landed weight (t) and percent of the western Newfoundland and southern Labrador region total landings, by coastal areas, 2000-2007.

Species Category	Bay St. George/Port au Port		Bay of Islands		Great Northern Peninsula		Southern Labrador	
	(t)	(%)	(t)	(%)	(t)	(%)	(t)	(%)
Crustaceans	1,067	8%	677	5%	11,010	85%	274	2%
Groundfish	920	18%	213	4%	2,853	55%	1,206	23%
Molluscs	9	1%	0	0%	499	83%	90	15%
Pelagics	11,633	32%	16,473	45%	7,768	21%	787	2%
Misc	35	13%	1	0%	168	61%	72	26%
Seals	NA	NA	NA	NA	NA	NA	NA	NA
Grand Total	13,664	25%	17,364	31%	22,297	40%	2,429	4%

Source: DFO 2008b.

Table 48. Commercial fishery landed value (\$000's) and percent of the western Newfoundland and southern Labrador region total value, by coastal areas, 2000-2007.

Species Category	Bay St. George/Port au Port		Bay of Islands		Great Northern Peninsula		Southern Labrador	
	(\$000's)	(%)	(\$000's)	(%)	(\$000's)	(%)	(\$000's)	(%)
Crustaceans	7,256	25%	3,475	12%	17,767	62%	390	1%
Groundfish	1,185	15%	297	4%	4,244	52%	2,411	30%
Molluscs	14	2%	0	0%	649	84%	113	15%
Pelagics	3,027	34%	3,723	41%	2,079	23%	184	2%
Misc	102	18%	1	0%	309	54%	164	29%
Seals	59	2%	17	1%	2,976	89%	289	9%
Grand Total	11,644	23%	7,513	15%	28,023	55%	3,551	7%

Source: DFO 2008b.

For generations, seal hunting has represented a significant source of income to residents of the western Newfoundland and southern Labrador region during a time of year when employment opportunities are extremely limited. In 2006, which was an excellent year for the pelt market, the landed value of seals, all parts, for the region was over \$1 million. The vast majority of seals landed within the region are represented by the Great Northern Peninsula coastal area.

The majority of seals taken in Newfoundland and Labrador waters are either harp or hooded seals, although ringed and bearded seals are also landed as are harbour seals and grey seals in small numbers. Approximately 70 % of the commercial hunt occurs on the Front in Newfoundland and Labrador, while about 30 % occurs in the Gulf of St. Lawrence. The majority of sealing occurs from late March through April and may extend into May. In addition to the commercial seal hunt, residents are allowed to take up to six seals for personal consumption.

Harp seals are classified by age as expressed by a description of the coat, e.g., whitecoat, ragged jacket, beater, bedlamer, and old. The price per seal pelt varies considerably from year to year according to the markets: prices soared to a high of \$105 per pelt in 2006 (CBC 2006) but dropped to \$62 in 2007 and \$33 in 2008 (CBC 2008). In 2006 the landed value (Canadian dollar) of seals in the four coastal areas of western Newfoundland and southern Labrador represented a little over one third of the entire value of Newfoundland and Labrador seal catch value (Table 48).

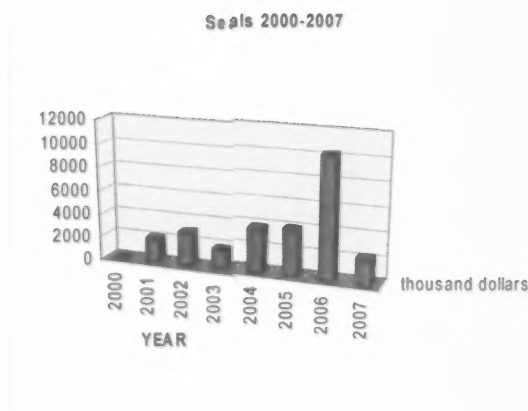
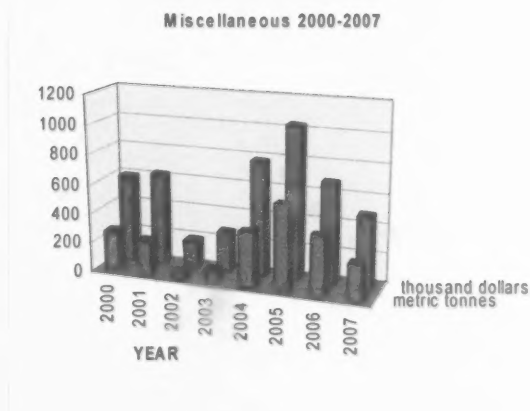
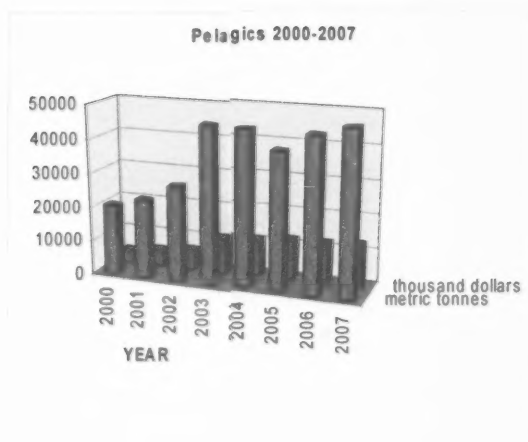
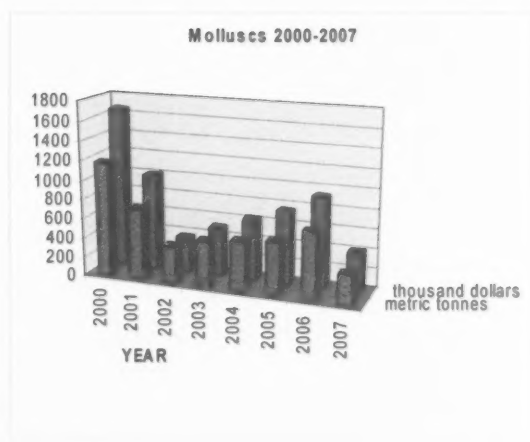
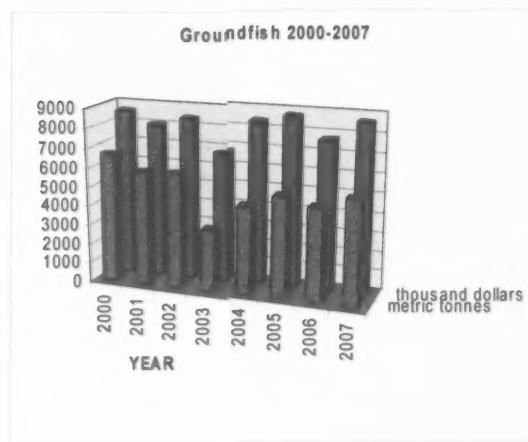
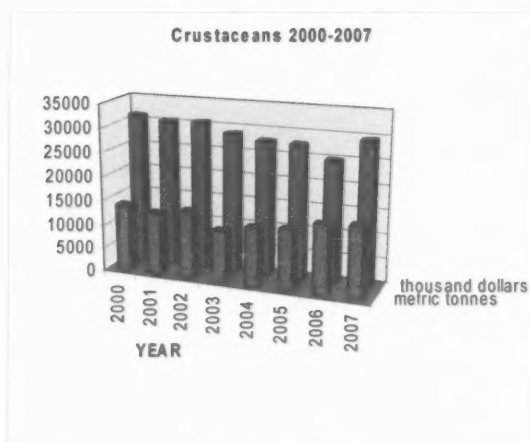


Figure 10. Commercial fishing and sealing landed weight (t) and landed value (Cdn \$) in western Newfoundland and southern Labrador, 2000-2007.

Commercial Fishing and Sealing Landed Wt. (t) 2000-2007

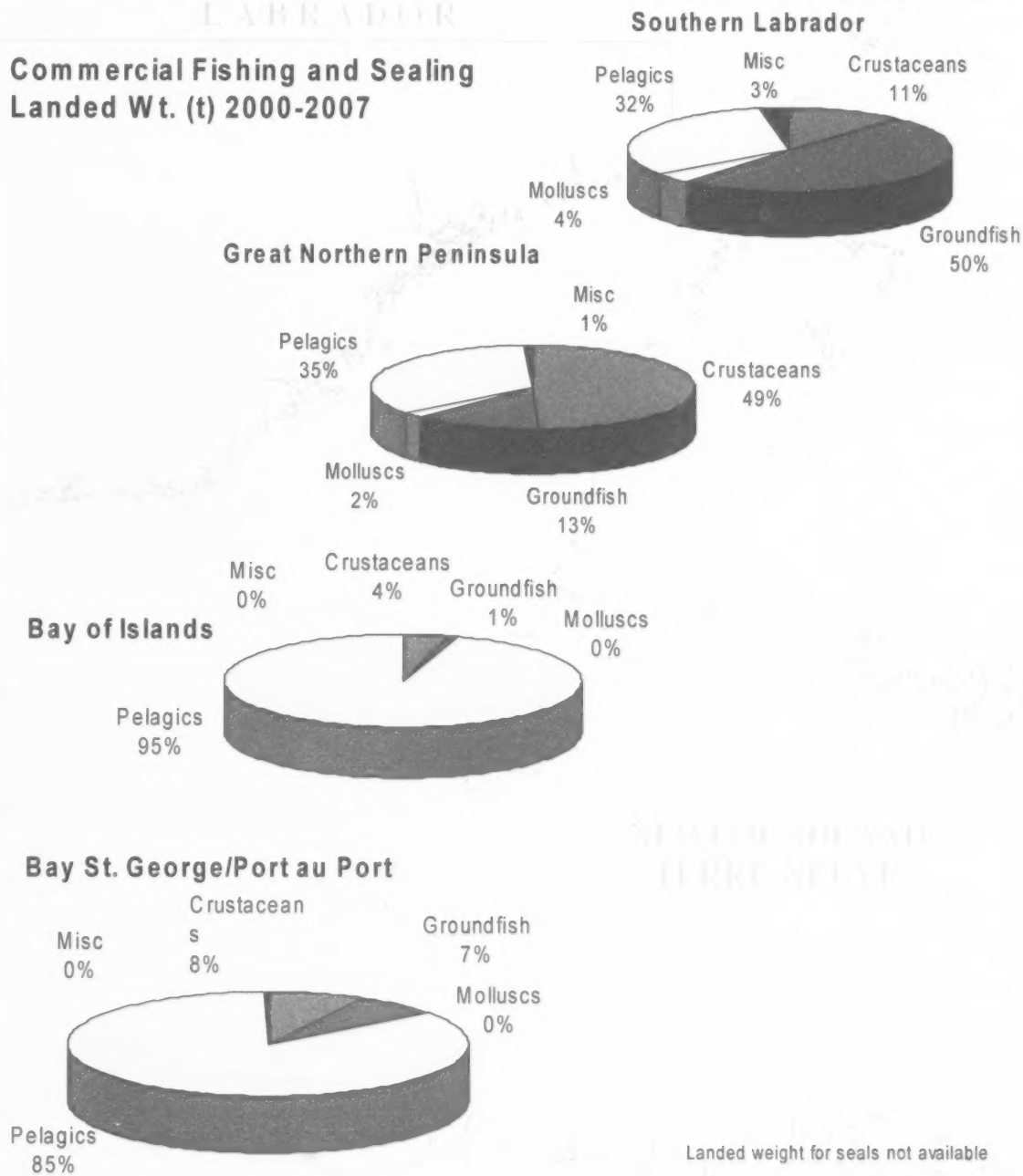


Figure 11. Percent composition of commercial fishing and sealing landed weight within coastal areas of western Newfoundland and southern Labrador, 2000-2007.

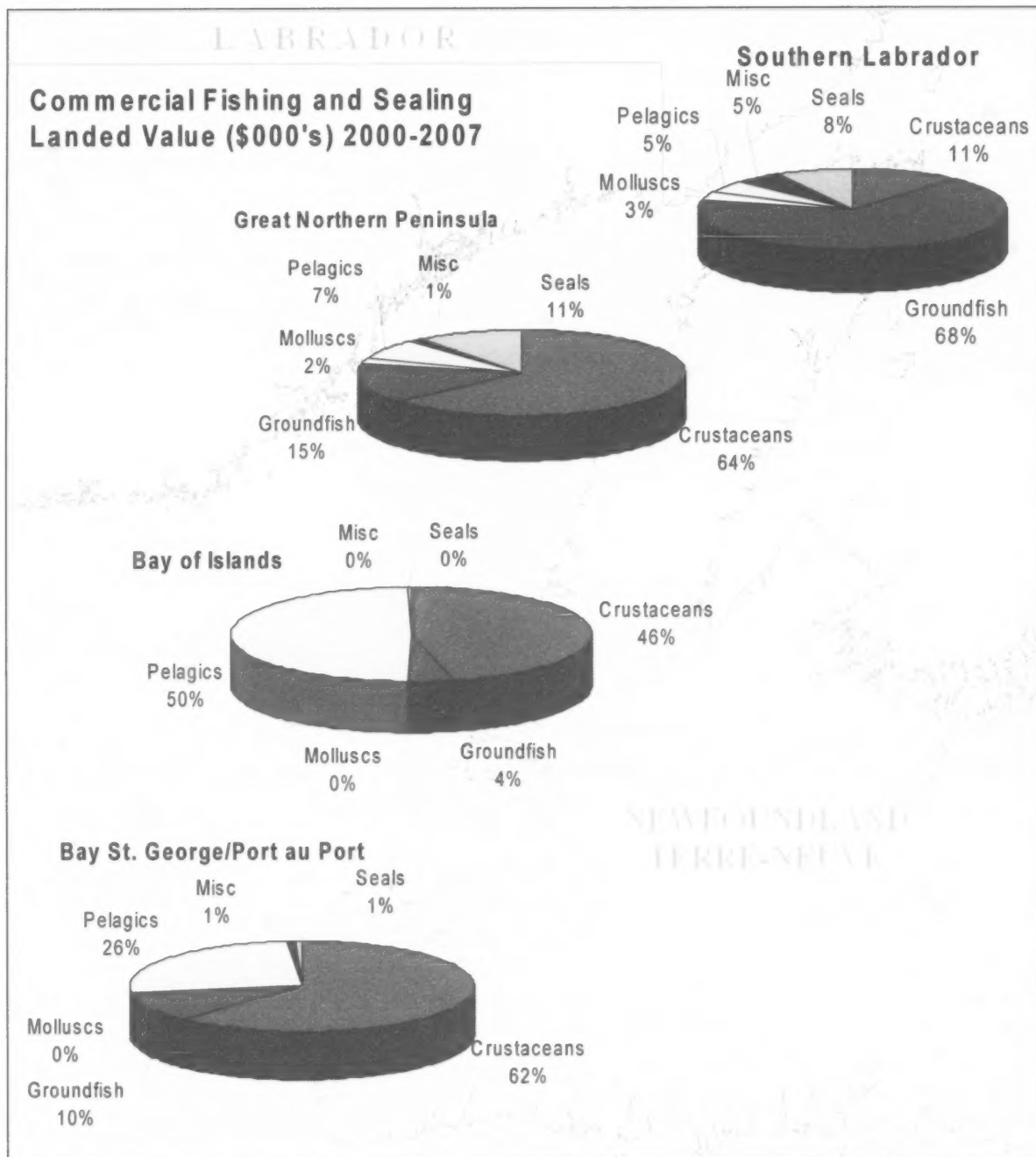


Figure 12. Percent composition of commercial fishing and sealing landed value within coastal areas of western Newfoundland and southern Labrador, 2000-2007.

3.4.2 Aboriginal fisheries

The Supreme Court of Canada in 1990 issued a decision concerning the Sparrow case in British Columbia affirming that the Musqueam First Nation possesses the right to fish for food, social and ceremonial purposes. The Supreme Court found that where an Aboriginal group has a right to fish for food, social and ceremonial purposes, it takes priority, after conservation, over other uses of the resource (<http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/afs-srapa-eng.htm>, accessed April 2009). To address and affirm this decision and to ensure stable fishery management, DFO launched the Aboriginal Fisheries Strategy (AFS) in 1992. Under AFS there are two provisions by which Aboriginal fishing licences are available: 1) the Allocation Transfer Program (ATP) and 2) Aboriginal Aquatic Resource and Oceans Management (AAROM) program.

The Allocation Transfer Program (ATP) assists a process for voluntary retirement of commercial fisheries licence holders and the re-issuance of such licences to appropriate Aboriginal groups. The program is therefore designed to provide Aboriginal groups with employment and income while not placing additional burdens on existing resources.

The Federation of Newfoundland Indians (FNI) is sole owner of a company named Mi'kmaq Commercial Fisheries Inc (MCF). The company owns a 44'11" enterprise, *Dream Catcher 2007*, which consists of two supplementary crab quotas, capelin, herring, and mackerel licences in the 3K fishing area off Newfoundland's North Coast. The company employs an Aboriginal skipper and two Aboriginal deckhands.

In the NAFO Division 4R, FNI owns five core enterprises with vessels under 39'11". All five possess a groundfish licence, with four having a lobster licence, and three possessing a crab quota. There are pelagic fixed gear licences associated with three of the enterprises as well. An Aboriginal person is designated to fish the licences in each case (DFO, Corner Brook, NL, Don Ball, Area Chief, Resource Management, pers. comm., 2009). One of the enterprises that the FNI possesses holds a groundfish licence that is currently being utilized by an Aboriginal person (Federation of Newfoundland Indians, Corner Brook, NL, Roger Gallant, Biologist, pers. comm., 2009).

The Aboriginal Aquatic Resource and Oceans Management (AAROM) program provides funding to qualifying Aboriginal groups to establish aquatic resource and oceans management bodies. For eligible groups, funding was available to obtain access to commercial fishery opportunities (including vessels and gear) and to build the capacity of groups to take advantage of aquaculture opportunities. One such body has been set up for Western Newfoundland whereby the FNI and Conne River Band have formed the Mi'kmaq Alsumk Mowimsikik Koqoey Association (MAMKA). For more information on MAMKA see Section 2.4.5.

MAMKA holds four enterprises with vessels less than 39'11". All four of these enterprises hold a lobster licence, with two of them holding a groundfish and snow crab quota. There are pelagic fixed gear licences associated with three of the

enterprises as well (DFO, Corner Brook, NL, Don Ball, Area Chief, Resource Management, pers. comm., 2009).

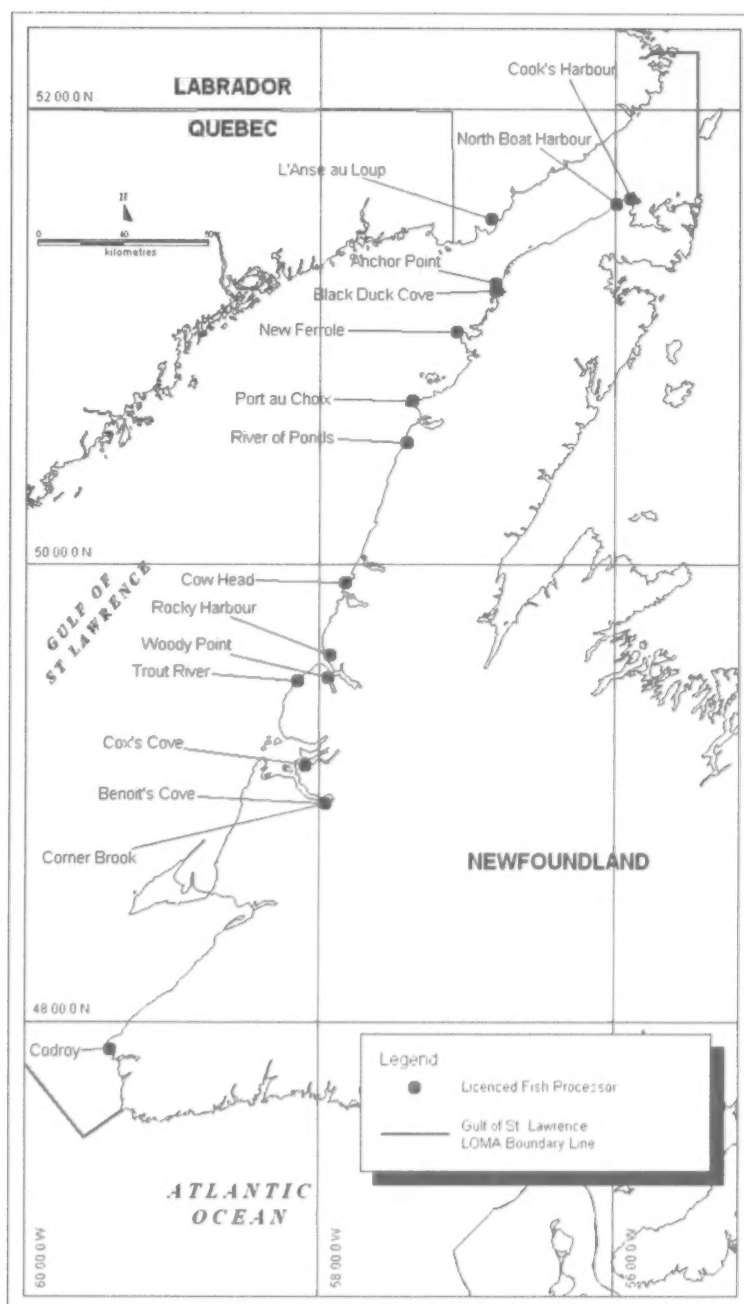
3.4.3 Fish and seafood processing

In 2008, 18 of the 112 licenced primary processing facilities in Newfoundland and Labrador were located in western Newfoundland and southern Labrador (Table 49, Figure 13). Several of the licenced processing facilities operate year round, while some function on a seasonal basis. Active processors function either in primary production (PP), which means producing a product ready for market, or in secondary production (SP), which involves a second layer of processing such as smoked or breaded and ready for market. At Humber Arm South in the Bay of Islands, Allen's Fisheries Limited and Ocean Import and Export Inc., which are two separate companies, operate in the same building, with Allen's focusing on primary production and Ocean Import and Export in secondary production.

Table 49. Licenced fish and seafood processors in western Newfoundland and southern Labrador coastal areas, 2009.

Coastal area	Company Name	Location	Species Processed
Bay St. George/Port au Port	Codroy Seafoods Inc.	Codroy	Crab, Other(PP), Lumpfish(PP) Groundfish, All Species (PP), Pelagics, All Species (PP), Lobster(PP)
Bay of Islands	Allen's Fisheries Limited	Humber Arm South	Groundfish, All Species (PP), Pelagics, All Species (PP), Lobster(PP), Snow Crab(PP), Lumpfish(PP), Mussels (Aquaculture)
	Barry Fisheries Ltd	Corner Brook	Pelagics, All Species (PP), Seal (PP), Seal (SP)
	Barry Fisheries Ltd	Cox's Cove	Pelagics, All Species (PP), Lobster (PP)
	Ocean Import and Export Inc.	Humber Arm South, same bld. as Allen's	Groundfish, All Species (SP), Pelagics, All Species (SP), Shellfish, All Species(SP)
Great Northern Peninsula	3 T's Limited	Woody Point	Snow Crab (PP), Groundfish, All Species (PP), Pelagics, All Species (PP), Lobster(PP), Lumpfish(PP)
	Carroll's Store And Fisheries Ltd.	Cooks Harbour	Whelk(PP), Sea Cucumber(PP), Lumpfish(PP)
	Deep Atlantic International Inc.	New Ferrole	Groundfish, All Species (PP), Pelagics, All Species (PP), Lobster(PP), Snow Crab(PP), Scallop(PP), Whelk(PP), Mussels (Aquaculture),
	Gould's Fisheries Limited	River of Ponds	Groundfish, All Species (PP), Pelagics, All Species (PP), Seal(PP)
	Gulf Shrimp Limited	Black Duck Cove	Shrimp(PP)
	H. Hopkins Limited	Cow Head	Groundfish, All Species (PP), Pelagics, All Species (PP), Lobster(PP), Lumpfish(PP)
	Harbour Seafoods Limited	Rocky Harbour	Groundfish, All Species (PP), Pelagics, All Species (PP), Lobster(PP), Crab, Other (PP), Tuna (PP), Eel(PP), Lumpfish (PP), Scallop (PP), Whelk(PP), Mussels (Aquaculture), Seal(PP)
	Hiscock Enterprises Limited	Trout River	Groundfish, All Species (PP), Lobster(PP)
	Nu Sea Products Inc.	Anchor Point	Shrimp(PP)
	Ocean Choice International L.P.	Port au Choix	Groundfish, All Species (PP), Shrimp (PP)
	Stan W. Elliott Limited	Cook's Harbour	Lumpfish(PP)
	Woodward's Fisheries Ltd.	North Boat Harbour	Lumpfish(PP)
Southern Labrador	Labrador Fishermen's Union Shrimp Co.	L'Anse au Loup	Groundfish, All Species (PP), Pelagics, All Species (PP), Scallop(PP), Lumpfish(PP)

Source: Department of Fisheries and Aquaculture 2008a, updated 2009.



Source: DFO, 2009.

Figure 13. Fish processing facilities in western Newfoundland and southern Labrador.

Collectively, the processing sector for the western Newfoundland and southern Labrador region employs approximately 1,500 people (Department of Fisheries and Aquaculture, St. John's, NL, Wanda Lee Wiseman, pers. comm., 2009). The number

fluctuates annually (Table 50) but appears to be declining both in the region and in the Province as a whole. Employment numbers for particular processing facilities is difficult to obtain, due to confidentiality policies. It is possible that the number of western Newfoundland and southern Labrador residents employed at processing facilities may be under-estimated due to employment in facilities just outside the region in nearby St. Anthony, on the Great Northern Peninsula, and Port aux Basques, in southwest Newfoundland.

Table 50. Number of workers employed at processing facilities in the western Newfoundland and southern Labrador region during peak times, 2004-2008.

Year	Western Newfoundland and Southern Labrador	Total Province
2008	1,500	11,508
2007	1,842	11,504
2006	1,602	11,828
2005	1,926	12,954
2004	1,759	13,346

Source: Department of Fisheries and Aquaculture 2009.

3.4.4 Aquaculture

Aquaculture is a major industry for the Province that has shown steady growth, with total export value in 2006 reaching \$52.3 million, and employment opportunities that have resulted in revitalization for some rural communities. The main species targeted for aquaculture production are Atlantic salmon, steelhead, Atlantic cod, and blue mussels. In 2006 there were a total of 207 aquaculture licences in the Province for work at 193 sites. Throughout the Province there are approximately 370 individuals employed by the industry (Department of Fisheries and Aquaculture 2007b).

On the whole, the western Newfoundland and southern Labrador region, with its shorelines exposed to heavy winds and long ice-bound seasons, is not as suitable for aquaculture as other areas of the Province, particularly the South Coast. This is particularly true for Atlantic salmon, which do not grow well in temperatures below 4 degrees Celsius.

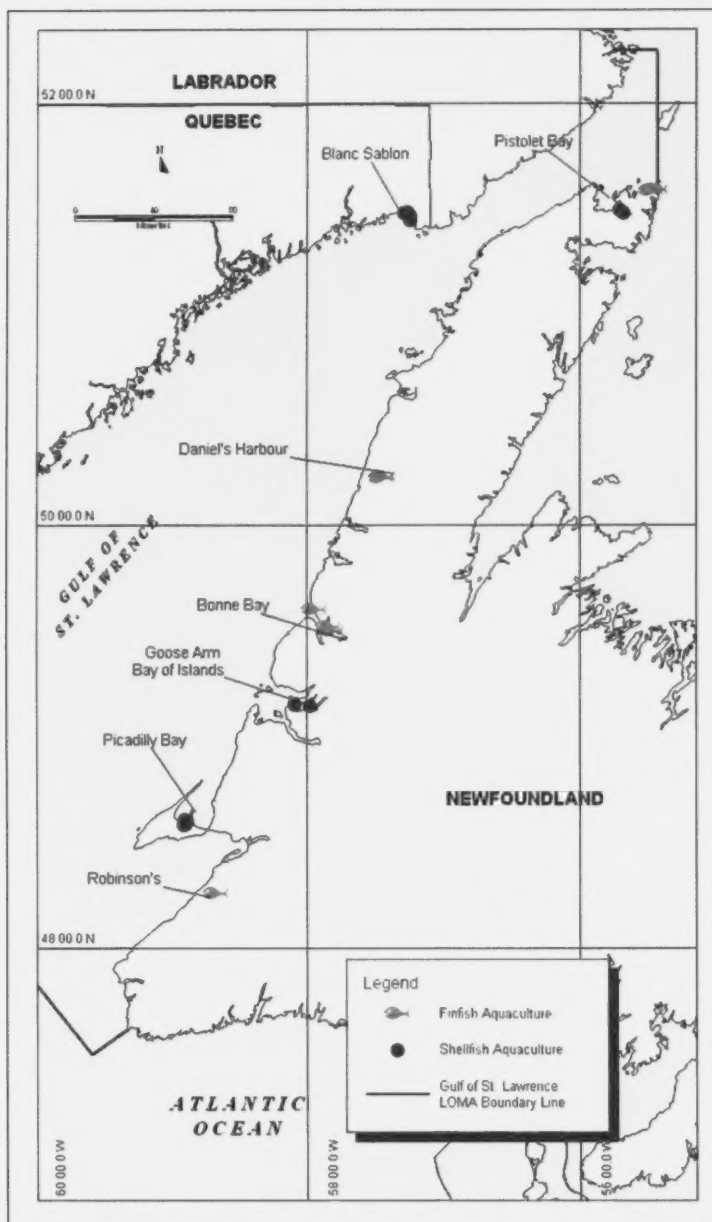
Seven companies were registered by Department of Fisheries and Aquaculture and active for aquaculture production within the region in 2008 (Table 51). Only one, Cold Ocean Salmon Inc. in Daniel's Harbour, is engaged in hatchery operations for Atlantic salmon; most others are involved in shellfish production. There is one eel hatchery in Robinsons and a cod grow-out facility in Keppel Harbour. Cod grow-out operations involve post-spawn cod, which are trapped, held in established farm sites, and cared for until they are ready to harvest. Locations of aquaculture sites in western Newfoundland and southern Labrador are shown in Figure 14.

Table 51. Aquaculture sites and companies in western Newfoundland and southern Labrador coastal areas, 2009.

Coastal Area	Operation	Status	Species	Company Name	Location	Tenure
Bay St. George/Port au Port	Shellfish	Approved	Blue Mussels	Plastik Industries of Canada	Piccadilly Bay	Crown
	Shellfish	Approved	Giant Scallop	Plastik Industries of Canada	Piccadilly Bay	Crown Land
	Shellfish	Awaiting Information	Blue Mussels	Plastik Industries of Canada	Piccadilly Bay	Crown Land
	Hatchery	Approved	Eel	North Atlantic Aquaponics Ltd.	Robinsons	Private
Bay of Islands	Shellfish	Closed	Blue Mussels	Goose Arm Mussel Farm Ltd.	Goose Arm, Bay of Islands	Crown
	Shellfish	Closed	Blue Mussels	Goose Arm Mussel Farm Ltd.	Outer Goose Arm	Crown
Great Northern Peninsula	Cod Grow-out	Approved	Atlantic Cod	Eugene Caines	Keppel Harbour	Crown
	Hatchery	Approved	Atlantic Salmon and trout eggs	Cold Ocean Salmon	Daniel's Harbour	Crown
	Hatchery	Closed	Atlantic Salmon	Northwater Products Limited	Daniel's Harbour	Private
	Shellfish	Closed	Blue Mussels	Arctic Aqua Farms Inc.	Inner Milan Arm, Pistolet Bay	Crown
	Shellfish	Approved	Blue Mussels	Arctic Aqua Farms Inc.	Milan Arm, Pistolet Bay	Crown

Notes: "Awaiting Information" indicates the site is pending approval. This could mean an existing site that is renewing its application or a new site. Plastik Industries of Canada sites were formerly called Cherob Developments Ltd. and GGR Developments Ltd. The Goose Arm Mussel Farm Ltd. in Goose Arm, Bay of Islands was accepted in 2008 but closed in 2009. The company's mussel farm in Outer Goose Arm was closed in 2008 and 2009.

Source: Department of Fisheries and Aquaculture 2008d. Updated March 2009.



Source: DFO 2009.

Figure 14. Location of aquaculture sites in western Newfoundland and southern Labrador.

Data on the numbers of workers at aquaculture sites were not available due to confidentiality.

3.4.5 Oil and gas

Interest in onshore oil reserves in western Newfoundland dates back to 1867, when a well was drilled in Parson's Pond on the Great Northern Peninsula. In the years following, to 1973, at least 60 wells were drilled in five areas: Parson's Pond, St. Paul's Inlet, Shoal Point, Deer Lake, and Bay St. George. Since 1990 there has been intensified activity, both onshore and offshore, for oil and gas exploration, particularly since the discovery of oil and gas on the Port au Port Peninsula in 1995 (Department of Natural Resources 2008).

Offshore exploration parcels are regulated under the Canada-Newfoundland Atlantic Accord Implementation Acts. In 2008 there were eight active licences for offshore activity (Tables 52, 53). These totalled approximately 1,079,230 ha. Their locations, and the locations of two new parcels out for bid in 2008, appear in Figure 15. The newest purchase was for parcel 1105 (Figure 15), which was sold to Corridor Resources Inc. in August 2007.

Table 52. Oil companies with offshore land interests in western Newfoundland and southern Labrador, 2008.

Company	Contact/Address	Licence Holder
B. G. Oil and Gas Ltd.	6 Mabledon Place, St. John's, NL, A1A 3V7	X
Canadian Imperial Venture Corp.	P.O. Box 6232, St. John's, NL, A1C 6J9	
Gestion Resources Ltd.	41 Dickinson Court, 15 Brewhouse Yard London, UK, EC1V 4JX	
NWest Energy Inc.	10 Fort William Place, Baine Johnston Centre St. John's NL, A1C 5K4	X
Ptarmigan Resources Ltd.	6 O'Brien's Hill, St. John's, NL, A1B 4G4	X
PDI Production Inc.	Suite 201, 2nd Floor Baine Johnston Centre, 10 Fort William Place St. John's, NL, A1C 1K4	
Corridor Resources Inc.	#301, 5475 Spring Garden Road Halifax, NS, B3J 3T2	
ENEGL Inc.	44 Peter Street, Manchester, M2 5GP	X
StatoilHydro	Forusbeen 50, N-4035 Stavanger	

Source: Sean Kelly, Manager of Public Relations, C-NLOPB, St. John's, NL, pers. comm. 2008; Department of Natural Resources 2008.

Table 53. Oil companies (representative only) holding offshore parcels in western Newfoundland in 2008.

Parcel Number	Company
1102	B.G Capital
1103	NWest Energy
1104	NWest Energy
1105	Corridor
1070	Canadian Imperial Venture Corp
1088	Imperial Oil Ventures Ltd.
1097	Ptarmigan (20%)
1098	Vulcan Minerals (50%)

Note: Number refers to parcel on map, Figure 15.

Source: Sean Kelly, Manager of Public Relations, C-NLOPB, St. John's, NL, pers. comm., 2008.

The Canada-Newfoundland Offshore Petroleum Board (C-NLOPB) facilitates the exploration and development of hydrocarbon resources in the Newfoundland and Labrador Offshore Area. It coordinates the provincial call for bids for drilling and exploration and posts the schedule of wells on its web site (<http://www.cnlopb.nl.ca>). The C-NLOPB lists the representative companies holding licences, although there may be several companies that are part owners. The C-NLOPB distinguishes between licences for exploration (EL) and for production (PL).

Onshore exploration is regulated under the Petroleum and Natural Gas Act. In 2008, there were 10 exploration permits and one production lease for onshore activity (Table 54). These totalled approximately 280,390 ha., including the northern Deer Lake Basin, which is outside the boundaries of this study. Most of the permits are located in the Bay St. George area (Department of Natural Resources 2008). Two holdings exist at Parson's Pond: one of the holdings for Contact Exploration Inc. and the consortium of Deer Lake Oil and Gas Inc./Leprechaun Resources Ltd./Vulcan Minerals Inc. (Ali Chaisson, General Manager, PDI Production Inc., pers. comm., 2008). The Department of Natural Resources issues the licences for onshore exploration and development. There is currently only one onshore well planned for drilling in 2008, located on the Port au Port Peninsula and operated by PDI Production Inc. under Production Lease #2002-01. PDI is a subsidiary of ENEGI Oil and has an office in St. John's.

Table 54. Onshore oil existing permit holders in western Newfoundland, May 2008.

Exploration Permit/Lease No.	Petroleum Rights Holder	Permit/Lease Area (ha)
2002-01	PDI Production Inc./Gestion Resources Ltd./CIVC Creditor Corporation	15,875
96-105	Vulcan Minerals Inc./Investcan Energy Corporation	33,300
03-101	Contact Exploration Inc.	15 402
03-102	Deer Lake Oil and Gas Inc./Leprechaun Resources Ltd./Vulcan Minerals Inc.	14 190
03-103	Contact Exploration Inc.	13 073
03-106	Vulcan Minerals Inc./Investcan Energy Corporation	38 800
03-107	Vulcan Minerals Inc./Investcan Energy Corporation	23 519

Source: Department of Natural Resources 2008.

An aspect to the industry in Newfoundland and Labrador that is unique to western Newfoundland is onshore to offshore exploration, whereby companies will often obtain a land-base lease, which extends along a transition zone reservoir leading to the offshore jurisdiction. These operations require authorization from both federal and provincial governments. Interest holders may enter into farm-in agreements with other companies to drill an onshore to offshore well. Shoal Point Energy on the Port au Port and Ptarmigan Resources Ltd. at Lark Harbour are two such examples. Tekoil and Gas Corporation, a company based in Texas with a farm-in agreement with Ptarmigan Resources, Ltd. over licence block EL 1069, announced in the spring of 2008 that the company had filed for bankruptcy protection, leaving some questions about Tekoil's future in the region (Tekoil and Gas Corporation 2008).

Vulcan Minerals, a junior exploration company with an office in St. John's, is conducting exploration at Parson's Pond and at Bay St. George. The company was instrumental in the creation of NWest Energy Inc., a public corporation specifically created to explore for petroleum in certain offshore parcels of western Newfoundland. In the spring of 2008, NWest announced that through a contract with Calgary-based Geophysical Service Inc., it would be acquiring 3D seismic data for an offshore area covering approximately 900 square kilometres, pending approval (NWest Energy Inc. 2008).

The relationships among the oil companies with interests offshore and onshore can be complex. The Canadian Imperial Venture Corporation (CIVC) completed a farm-in arrangement with Hunt/PanCanadian on the Garden Hill location well that had confirmed oil in 1995. A Production lease was issued to CIVC, but difficulties led to the company negotiating linked transactions with several other companies, as described in the Oil and Gas Report (February 2008).

The Department of Natural Resources issues Oil and Gas Reports that describe these and other exploration and production activities for the Anticosti Basin, the Bay St. George Sub-basin, and numerous onshore sites.

3.4.6 Forestry and Agriculture

3.4.6.1 Forestry: The Newfoundland and Labrador Department of Natural Resources, Forestry Services Branch, divides insular Newfoundland into eighteen Forest Management Districts and Labrador into six additional districts. Portions of Forest Management Districts 14, 15, 17, 18, and 21 fall within the western Newfoundland and southern Labrador region (Figure 16). A large portion of District 21 lies within the Southern Labrador coastal area.

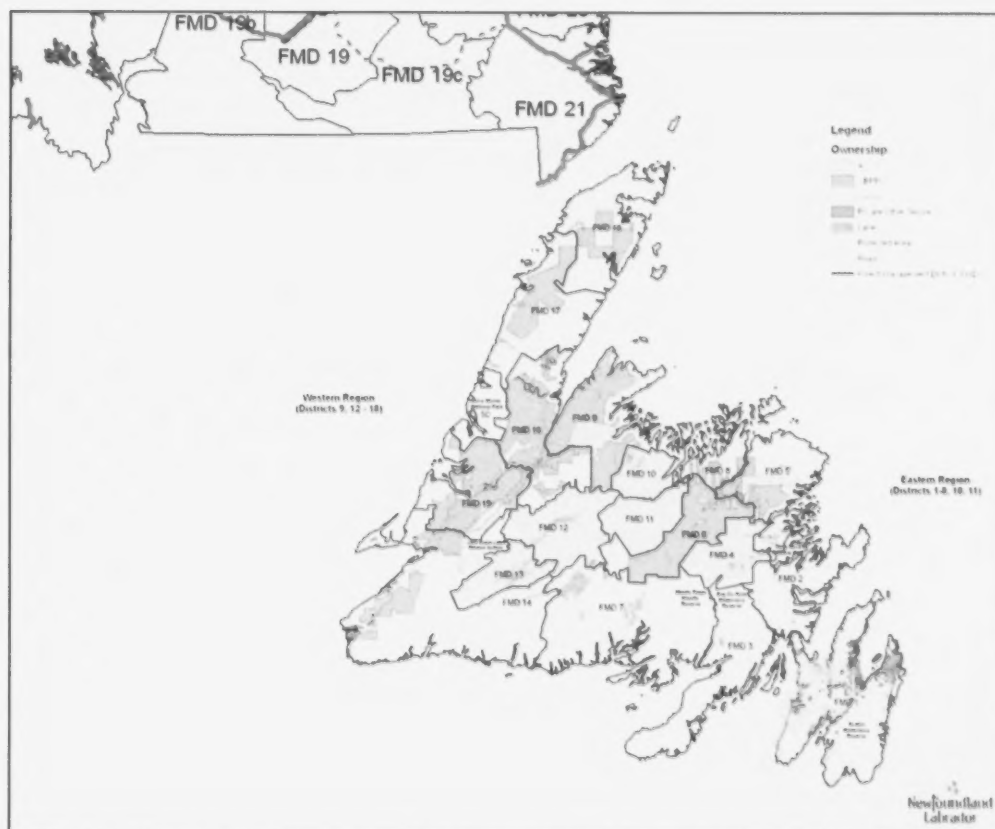
Districts 14 and 15 encompass west and southwest Newfoundland, from Burgeo and Port aux Basques in the south to the southern boundary of Gros Morne National Park in the north. District 14 is administered from St. Georges in the Bay St. George/Port au Port coastal area, while District 15 is administered from Corner Brook in the Bay of Islands coastal area. The two districts combined are also referred to as Planning Zone 6.

Districts 17 and 18 extend from Gros Morne National Park in the south to include all of the Great Northern Peninsula to the north. District 17 is administered from Port Saunders in the Great Northern Peninsula coastal area, while District 18 is administered from Roddickton, outside the coastal area. The two districts combined are also referred to as Planning Zone 8. Figure 16 depicts the locations of the Forest Management Districts within western Newfoundland and southern Labrador as well as the forestry land tenure. Since the island map is pre-December 2008, the lands showing as being held by Abitibi-Bowater have been since taken over by the Province.

Corner Brook Pulp and Paper Limited (CBPPL), a division of Kruger Inc., manages over two million hectares (five million acres) of forested land on the island of Newfoundland. Of the two million hectares of total land area, only 930,000 hectares are forested and approximately 750,000 hectares produce timber for the mill. The remainder of the land is bog, barren, water, and scrub land. The company estimates that it harvests only 37% of the area it manages (Corner Brook Pulp and Paper 2009).

The two major tenure holders in Zone 6 are the Government of Newfoundland and Labrador (the Crown) and Corner Brook Pulp and Paper Limited. Through its timber licences and other arrangements, CBPPL accounts for 30% of the total land area in the zone, with the Crown controlling 70%. The majority of the licences are due to expire in 2037. The productive forest breakdown for Zone 6 is 50% for each tenure holder.

Similarly, the two major tenure holders in Zone 8 are the Government of Newfoundland and Labrador (the Crown) and Corner Brook Pulp and Paper. While there are CBPPL timber limits in District 18, they have been exchanged to the Crown until 2019.



Note: The island map is pre-December 2008. In December 2008 the Province passed legislation expropriating all of Abitibi-Bowater's timber lands.

Source: Department of Natural Resources, Forestry Services Branch 2008.

Figure 16. Forest Management Districts and forestry land tenure, Newfoundland and Labrador.

Corner Brook Pulp and Paper Limited is subject to the provisions of the Forestry Act 1990, and as a condition of the Certificate of Managed Land issued to the Company annually under this Act, it must operate in accordance with the Province's Environmental Protection Guidelines for Ecologically Based Forest Resource Management. The company issues Five Year Operating Plans for each of the Planning Zones and posts them on the CBPPL web site. The planning documents cover a range of topics, including descriptions of the ecoregions and forest characterization, the annual allowable cut, management objectives, harvesting summaries, and silviculture treatments. The Minister for Environment and Conservation recently released a decision regarding the CBBPL's Five Year Operating Plan for Planning Zone 6, which triggered some criticism from conservation and preservation groups. Regulations require CBPPL to use proper buffer zones around sensitive areas for Atlantic salmon, to respect a 500 metre "no roads" buffer next to Flat Bay Brook in the St. Georges/Port au Port coastal area, and to contact the Province if it plans to cut within one kilometre of a protected area (Department of Environment and Conservation 2009a).

The Province sets the Annual Allowable Cut, which is re-calculated every five years using the latest data possible to incorporate into the analysis. The Province published a Twenty Year Forestry Development Plan for the years 1996-2015, which outlined the significant shift from traditional forest, i.e. timber management, to an adaptive ecosystem-based management approach. Highlights of the Development Plan include the following topics: criteria and indicators for defining sustainable forest management, a biodiversity assessment management tool useful in determining habitat requirements for endangered species, the establishment of District Planning Teams composed of citizens and stakeholder groups, the downgrading of the Woodlot Program to an extension service, the transfer of the Christmas Tree program to the Agriculture branch of the Department, an update on forest service roads, and the replanting work of the silviculture program (Department of Natural Resources 2003).

The forestry sector in Newfoundland & Labrador has been a major contributor to the provincial economy for many years. The Province's forest products sector consists of the newsprint, lumber, and value-added industries. Over the past number of years, the provincial forestry sector has had to deal with many issues such as rising energy costs, reduced timber supplies, a strong Canadian dollar, diminishing demand, and new international competition.

Corner Brook Pulp and Paper Limited owns and operates a newsprint mill—the only mill in the western region—which is located within the Port of Corner Brook, along the Humber Arm of the Bay of Islands. A second newsprint mill, owned by Abitibi-Consolidated and located in Port Harmon on Bay St. George, closed in 2005. The Abitibi-Consolidated mill had been for many the main employer for the town of Stephenville. Abitibi-Bowater (the recent merger of two companies) in 2009 was in

the process of closing its mill in Grand Falls-Windsor, in central Newfoundland, making Corner Brook Pulp and Paper the only newsprint mill in the Province.

Construction of the original mill in Corner Brook commenced in 1923, with the first paper produced in 1925. It was incorporated in 1927 as the International Paper Company of Newfoundland Limited and acquired by Bowater Corporation in 1938. In December 1984 the company became part of Kruger Inc., at which time it adopted the name Corner Brook Pulp and Paper. The mill employs 700 people within the mill and the company's Deer Lake Power hydroelectric operations, plus another 600 within its woodland and silviculture operations in nearly 50 communities. The mill produces an estimated 1,280 tonnes of newsprint and discharges 84,600 cu meters of treated effluent daily (Corner Brook Pulp and Paper 2009).

The North American newsprint markets have been in steady decline for years, a trend that has negatively affected the Province's newsprint industry. Production continues to be impacted by deteriorating market conditions that stem from web-based competition and a shift by newspaper publishers towards smaller tabloid format papers. In 2008, overall provincial newsprint shipments totalled 525,372 tonnes, representing a decline of 4.4% compared to 2007, while the value of shipments increased by 12.0% to an estimated \$390 million as a result of higher transaction prices. Newsprint shipments are expected to decline further as a result of the closure of the Grand Falls-Windsor mill and moderate production declines at Corner Brook Pulp and Paper (Department of Finance, Economic Research and Analysis Division 2009).

In 2009 the mill in Corner Brook was operating three paper machines with a combined capacity for 350,000 tonnes per year. Kruger announced that it will shut down paper machine No. 4 at the mill for an eight-week period beginning in March 2009 and will shut down Nos. 2 and 7 for three days of maintenance after No. 4 is brought back on line. It is estimated that these temporary shutdowns will remove 15,000 tonnes from the market and affect up to 30 employees (Department of Finance 2009).

Besides newsprint production, the forest resources of western Newfoundland and southern Labrador also supply the needs of local sawmills, which produce lumber and employ small numbers of people. The volume of provincial lumber production is estimated to have decreased by 40% in 2008 to approximately 70 million board feet. Many producers in Newfoundland and Labrador are finding it unprofitable to operate their sawmills due to a continual decline in lumber prices (more than 50% since 2004), which are a result of downturns in the Canadian and U.S. housing markets. Adding to this challenge, competition with larger mills in other parts of the country and higher transportation costs have hindered the local industry's ability to compete in the depressed market. Furthermore, the downturn in the newsprint industry has resulted in reduced demand for pulp chips, which are a valuable by-product of lumber production and contribute greatly to sawmill cash flow (Department of Finance 2009).

Domestic wood cutting is pursued by many residents of the region, particularly in District 14. It requires obtaining permits for harvesting wood outside of company held lands. Table 55 lists the number of domestic wood cutting permits in 2009 that were issued within each of the four relevant Forest Management Districts in western Newfoundland and the average amount harvested per permit. The column containing information on total cubic metres is the "sum of volume" or timber volume allocated for domestic harvesting under all permits in that district.

Table 55. Domestic wood cutting permits by Forest Management Districts in western Newfoundland and southern Labrador.

Forest Management District	Number of Permits	Average m ³ per permit	Total m ³
14	1,610	18.9	30,404
15	371	18.9	7,007
17	706	17.8	12,600
18	825	18.9	15,556

Source: Dept of Natural Resources, Forestry Services Branch 2009.

The downturn in forest industries in the Province is also evident from statistics showing a decline in employment over the past decade. Labour force data from Statistics Canada for forestry, logging, and support activities show that employment for individuals 15 years of age and older declined 31% from 2001 to 2006 (Table 56).

Table 56. Labour force characteristics, for forestry, logging, and support activities, for individuals 15 years of age and over, Newfoundland and Labrador, 1996 – 2007.

Year	Labour force (000's)	Employment (000's)	Full-time employment (000's)	Part-time employment (000's)	Unemployment (000's)	Unemployment rate (%)
2007	1.2	0.5	0.5	0	0.7	58.3
2006	1.4	0.9	0.9	0	0.5	35.7
2005	1.7	1.5	1.5	0	0	0
2004	1.7	1.2	1.2	0	0	0
2003	1.4	0.8	0.8	0	0.6	42.9
2002	1.6	0.9	0.9	0	0.7	43.7
2001	1.9	1.3	1.3	0	0.7	36.8
2000	1.8	1.3	1.2	0	0.5	27.8
1999	2.9	1.8	1.8	0	1.1	37.9
1998	3.1	1.7	1.7	0	1.4	45.2
1997	2.6	1.5	1.5	0	1	38.5
1996	2.2	1.2	1.2	0	1	45.5
% Change 1996 - 2001	-14	8	8		-30	-9
% Change 2001 - 2006	-26	-31	-31		-29	-1

Source: Statistics Canada, Labour Force Historical Review CD 2008.

Employment data for the forestry and logging sector of the industry, grouped by Rural Secretariat Regions of western Newfoundland and southern Labrador, show logging to be the primary forestry activity within the region (Table 57). In addition, employment at forest nurseries and reforestation sites may be playing an important role, as suggested by data for the Province as a whole supplied by the Department of

Natural Resources, Forestry Services Branch (not shown below). These data show an increase in the seedling shipments from nurseries from 1999 to 2007, which correlates with an increase in artificial reforestation activity (Department of Natural Resources, Forestry Services Branch, Corner Brook, NL, Basil English, pers. comm., 2009).

Table 57. Forestry and logging workers 15 years of age and over in western Newfoundland and southern Labrador, 2006, by the North American Industry Classification System (NAICS) 2002.

Coastal Area	Forestry Activity			Total
	Timber tract operations	Forest nurseries and gathering of forest products	Logging	
Corner Brook - Rocky Harbour Rural Secretariat Region			240	240
Labrador Rural Secretariat Region		25	20	45
St. Anthony - Port au Choix Rural Secretariat Region			95	100
Stephenville - Port aux Basques Rural Secretariat Region			120	130
Newfoundland and Labrador	10	80	1,070	1,155
Canada	580	2,800	62,550	65,930

Source: Community Accounts, based on Statistics Canada Census 2006 data.

A 2006 survey conducted by Bath and Associates of attitudes and knowledge held by residents in western and central regions of Newfoundland revealed relevant information about residents of the western region. The western region encompassed Forest Management Districts 14, 15, and 16 and included a sample of 429 households, representing a 52% response rate. Approximately 13% of households derived income from timber activities (e.g., pulpwood or saw log cutting, selling of firewood) on forested lands, which represented a decline from 22% in 2000, as reported in an earlier study by a separate researcher. Other findings from the study by Bath and Associates are reported in Table 58 (Bath 2006).

Table 58. Responses to selected questions from the Bath and Associates study for residents in the western Newfoundland region (Forest Management Districts 14, 15, and 16).

Question	Yes	No	Not Sure		
Do you or any of your immediate family derive income from timber activities (pulpwood or sawlog cutting, selling of firewood, etc.) on forested land? (n=419)	13%	86%	1%		
Do you or any of your immediate family derive income from non-timber activities (selling of rabbits or berries, guiding, trapping, etc.) on forested land? (n=421)	9%	90%	1%		
	Strongly disagree	Disagree	Neither	Agree	Strongly Agree
There is sufficient wood on the Island for all users including paper mills, sawmills, and domestic firewood cutters. (n=406)	24%	44%	15%	15%	2%
There are not enough areas on the Island where you can go and cut trees for your own firewood. (n=399)	4%	32%	30%	27%	8%
Domestic wood harvesting is resulting in habitat loss for wildlife. (n=419)	12%	35%	24%	23%	7%
Domestic users cut areas close to rivers and streams that have been left	6%	27%	37%	23%	6%

by industry for buffer zones. (n=420)					
There should be better enforcement of domestic wood cutters. (n=419)	4%	12%	17%	53%	14%

Source: Adapted from Bath 2006.

The study also asked residents to rank in terms of priority their values of forests. Residents of western Newfoundland in general ranked non-consumptive and nature-oriented values as higher priority. These included wildlife, scenic beauty, protection of watersheds, wilderness preservation, and plants. The study suggested that societal values of the forest appear to be changing from the traditional view of a forest for timber and forestry jobs to one that includes nature-oriented and ecosystem services values. There were significant differences in attitudes between residents deriving their income from timber activities and those from non-timber activities (Bath 2006).

An important dimension to the forestry sector in western Newfoundland and southern Labrador is the strong interest in sustainable forest management and the interaction of sustainable forestry with strong local communities. The Model Forest is a not-for-profit corporation formed in 1992 as a partnership of organizations and individuals working on the implementation of activities that advance sustainable forest management and community economic development. The Model Forest provides a forum where partners exchange often conflicting views and work together to develop innovative, region-specific approaches to sustainable forest management. A recent activity of the Model Forest is its participation in a national Forest Community Program, which in western Newfoundland is engaging communities of the Humber Valley-Gros Morne Corridor and on the Great Northern Peninsula in multi-stakeholder approaches to a more inclusive form of forest management that benefits local communities (Model Forest of Newfoundland and Labrador 2009).

3.4.6.2 Agriculture: The western Newfoundland and southern Labrador region is part of Agricultural Region No. 3 of Newfoundland and Labrador, which encompasses western Newfoundland including Cormack, the Humber Valley, and White Bay, as well as all of Labrador (Figure 17). Statistics for the Bay St. George/Port au Port coastal area were available but data from the coastal areas to the north were amalgamated with the Cormack region and all of Labrador. Goose Bay and Cormack account for the majority of farms that have been amalgamated with the northern coastal areas. Farm categories, value, and employment data are presented in Table 59; however, readers should note that data for Census Division 5 include the Cormack, Northern Peninsula, and Labrador regions.

Table 59. Number of farms, acreage, farming activity, income, capital investment and employment within western Newfoundland and southern Labrador, 2006.

Census Division	# Farms	Total Farm Area (acres)	Type of Activity						Farm Cash Receipts (\$)	Farm Capital Investment (\$)	Total Weeks of Paid Employment
			Cattle	Pigs	Goats	Vegetables	Fruit & berries	Greenhouse & Nursery			
Division 4	55	14,874	11	1	2	9	2	9	5,831,334	27,311,427	1,860
Division 5	54	10,883	8	0	4	5	5	8	10,052,627	28,243,435	2,822
Newfoundland and Labrador	558	89,441	92	9	29	94	36	111	106,965,108	259,072,309	35,905

Notes: Division 4 includes census consolidated subdivisions 4001, 4006, 4016, and 4022. Division 5 includes 5007, 5019, 9041, 9009, 9031, 9047, 10020, and 10001.

Source: Department of Natural Resources, Forest Resources and Agrifoods March 2009.

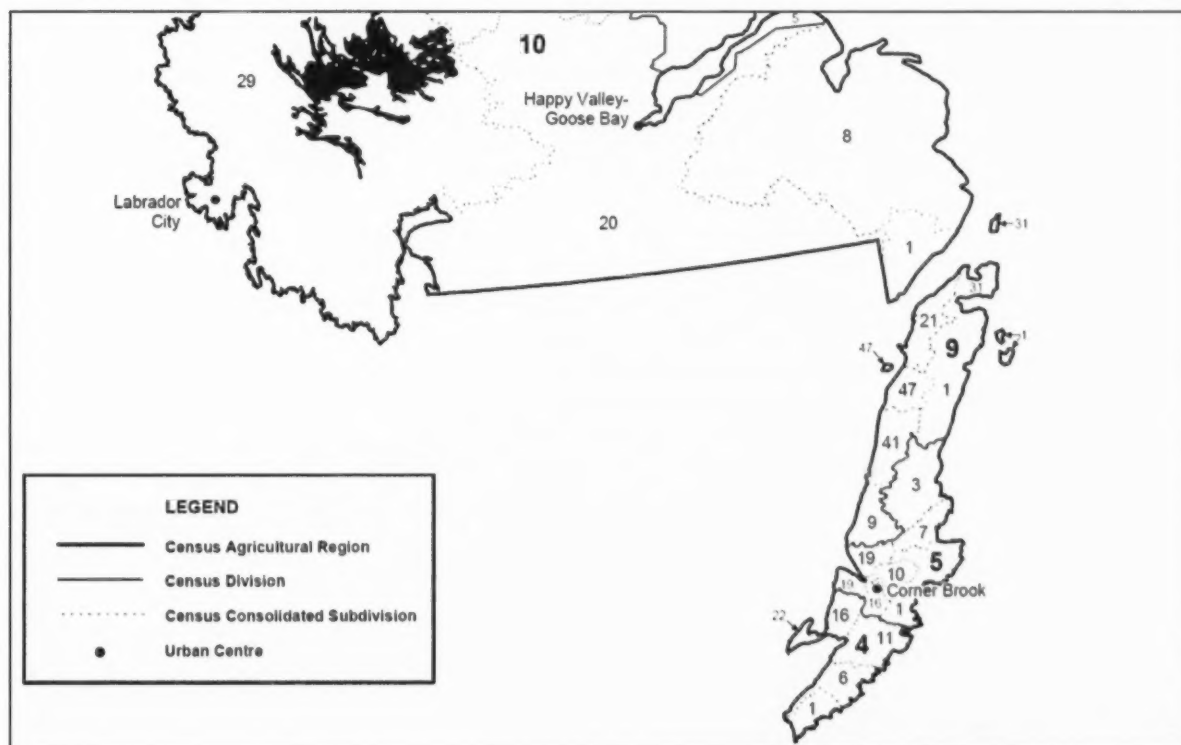


Figure 17. The portion of Agricultural Region No. 3 that lies within the western Newfoundland and southern Labrador region.

Of a total of 558 farms in Newfoundland and Labrador in 2006, 55 are within the Bay St. George/Port au Port coastal area, making it the largest farming area of western Newfoundland and southern Labrador (Table 60).

Table 60. Number of farms in western Newfoundland and southern Labrador coastal areas, 2006.

Coastal Area	# of Farms
Bay St. George/Port au Port	55
Bay of Islands	1
Great Northern Peninsula	12
Southern Labrador	2

Source: Department of Natural Resources, Forest Resources and Agrifoods, March 2009.

Although detailed Province-wide information was not available, 2008 in general was a good year for farmers across the Province. Revenue from most agricultural products exhibited positive growth, particularly for dairy and egg production as well as fur production (Department of Finance 2009).

Dairy farms are an important commodity group within the agriculture sector in Newfoundland and Labrador. There are five dairy farms in western Newfoundland but none in Southern Labrador. In addition to these, there are five dairy farms in nearby Cormack and two within the vicinity of Deer Lake, making a total of 11 dairy farms within or in close proximity to the coastal areas of the region.

In 2001 Newfoundland and Labrador joined the National Milk Marketing Plan whereby the Province obtained an industrial milk quota of 31 million litres. As of 2009, dairy farmers in the Province were producing 16-18 million litres per year. The actual value of the dairy industry in western Newfoundland for 2009 is \$50 million (Table 61). The average investment per dairy farm is \$4 million (John Moores, Dairy Farmers of Newfoundland and Labrador, Mount Pearl, NL, pers. comm., March 2009).

Table 61. Actual and projected value of the dairy industry in western Newfoundland, and Newfoundland and Labrador as a whole, 2009 and 2015.

Projection Year	Value (\$) millions		People directly/indirectly employed in western Newfoundland	Average investment per dairy farm (\$) millions
	Western Newfoundland	Newfoundland and Labrador		
2015	65	175 – 195	560	
2009	50	125	480	4

Source: Dairy Farmers of Newfoundland and Labrador 2009.

3.4.7 Mining and peat harvesting

A report from the Department of Natural Resources states that the dollar value of mineral exports from the Province has increased 470% since 2004, with shipments amounting to nearly \$3.9 billion in 2007 (<http://www.nr.gov.nl.ca/mines&en/mining/MiningoverviewFeb2008-final>). While a relatively small portion is represented by mining activity in western Newfoundland and southern Labrador region, industry forecasts

indicate that the industry will grow in the near future in the Port au Port and Stephenville area.

Atlantic Minerals Limited, located at Lower Cove on the Port au Port Peninsula, operates limestone and dolomite quarries, a processing plant, and a deepwater ship loading facility. The chemical-grade high calcium limestone and dolomite is sold to the iron ore industry in Labrador West and Quebec, and is exported for various chemical/industrial uses. According to the company's web site, total shipments of limestone and dolomite from Lower Cove are forecast to increase from approximately 1.8 million tonnes in 2007 to 2 million tonnes in 2008. The seasonal operation employs about 110 people at peak production (Atlantic Minerals 2008).

Galen Gypsum Mines Limited in Coal Brook (Codroy Valley) started mining its Coal Brook gypsum deposit in the Bay St. George area in 1999. With its sole market being the former Lafarge Gypsum Canada wallboard plant in Corner Brook, Galen shut down its mining operation, which employed about five people, as a result of Lafarge's decision in 2007 to close its Corner Brook plant. The question remains whether the company can develop export markets for its gypsum and whether a new owner can be found for the wallboard plant at Corner Brook.

Vulcan Minerals owns the mineral rights over a portion of the northern Bay St. George Basin. In 2002 the company drilled Captain Cook #1, which discovered a 165-metre thick section of evaporites consisting of halite (salt) and a potentially significant potash zone. In 2004 the Company drilled Flat Bay #2 well, which intersected approximately 200 metres of salt approximately 2 km from Captain Cook. Seismic data suggests that these discoveries are connected and that a potentially significant salt/potash resource exists in the area (Vulcan Minerals 2008).

Vulcan has mineral claims in Bay St. George that cover areas with anomalous uranium values in lake-bottom geochemical samples. Another claim with potential is at Lost Pond Property, approximately 20 km north of the Bay St. George site.

Table 62 presents the mining companies operating within the western Newfoundland and southern Labrador region.

Table 62. Mining operations in the western Newfoundland and southern Labrador region, 2009.

Company	Location	Resource
Bay St. George/Port au Port		
Atlantic Minerals Limited	Lower Cove	Limestone and dolomite
Galen Gypsum Mines Limited	Coal Brook	Gypsum
Peat Resources Ltd	Stephenville	Peat
Stephenville Peat Moss Ltd	Stephenville	Peat
Bay of Islands		
Vulcan Minerals	Corner Brook	Salt/potash

Source: Government of Newfoundland and Labrador, Mining in Newfoundland and Labrador 2009.

There are two peat harvesting operations in Bay St. George/Port au Port coastal area (Table 62). Peat harvesting is administered under the provincial Quarry Minerals Act. Peat Resources Ltd is a Toronto-based company that was formed to develop, produce, and market peat fuel for use in electricity generating stations and other facilities. The company holds exploration licences on over 130,000 hectares of peatlands in several areas of Newfoundland. Its initial evaluation of peatlands in the Stephenville-St. George's area has established the existence of over 40 million cubic metres of fuel-grade peat.

The harvesting technique being developed by Peat Resources is a wet-based harvest in which the peatland is not drained, the result being a faster ecological rehabilitation and accumulation of carbon.

The company is currently testing a small sample of fuel peat pellets at a facility in Stephenville, after which it will be shipped to Ontario for further testing. Peat Resources hopes to be the principal supplier of peat fuel to the North American energy market (Peat Resources 2008).

Stephenville Peat Moss Ltd., the second peat harvesting company, is focused on horticultural peat moss development, with the intent to harvest, bag, and sell peat moss to the United States. The harvesting is intended to occur on 109 hectares of crown lands near Shallop Cove, in the Bay St. George/Port au Port coastal area, designated as Peatland 69 on the provincial peatland inventory maps. The operation is intended to follow the standard methods of ditching and draining that are typical of peat harvesting operations. The company is projecting that it will hire up to nine seasonal employees during seasonal operations (Three-D Geoconsultants Ltd. 2006).

3.4.8 Transportation

3.4.8.1 Airport use: The Deer Lake Airport is located just outside the boundaries of the nearest coastal area but has a significant impact on the economic growth and social vitality of the communities throughout the western Newfoundland and southern Labrador region. In 2007 the airport experienced a record-setting 18.4% increase in passenger use, in spite of passenger movements at all six of the Province's major airports recording a decrease of 0.1% during that year (Table 63). Passenger use at Deer Lake Airport surpassed that of Gander (+14%), Wabush (+6%), and Goose Bay (+2%), while decreases were recorded at St. John's (-5%) and Stephenville (-17%) (Table 63). Traffic at St. Anthony Airport during 2007 was on par with 2006 levels (Department of Tourism, Culture and Recreation 2007).

Table 63. Airport passenger movements in Newfoundland, January to December 2006 and 2007.

Airport	2007	2006	% Change
St. John's	1,185,302	1,243,002	-4.6
Gander	72,630	63,527	14.3
Deer Lake	278,532	235,286	18.4
Stephenville	12,277	14,715	-16.6
St. Anthony	21,134	21,141	0.0
Province	1,737,140	1,739,273	-0.1

Source: Department of Tourism, Culture and Recreation Year-End Provincial Tourism Performance 2007 and Early Tourism Outlook 2008.

The year-end provincial tourism performance report from the Department of Tourism, Culture and Recreation (2009) showed a 6% increase in airport passenger movements for the Deer Lake airport in 2008.

There has been a steady increase in passenger use at the Deer Lake Airport throughout the year since 2003 (Figure 18). The increase in 2007 was mainly for peak summer and shoulder seasons.

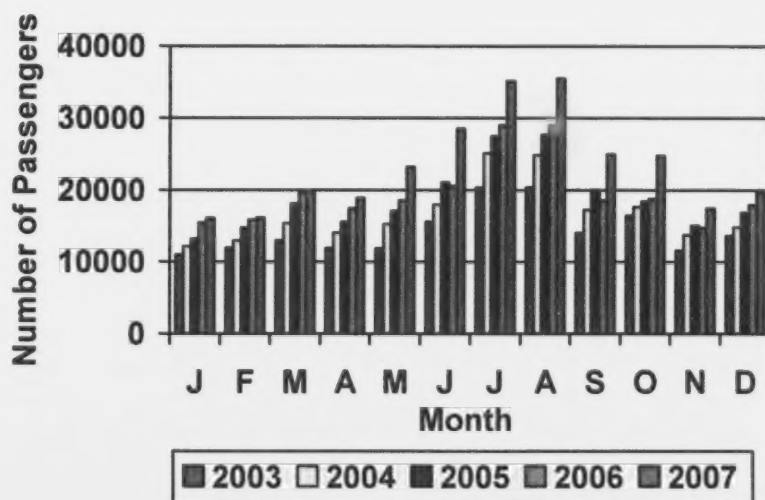


Figure 18. Passenger movements at Deer Lake Regional Airport, 2003 -2007.

Source: Deer Lake Regional Airport 2008.

3.4.8.2 Ferry and shipping traffic:

Cabot Strait Ferry

The Cabot Strait ferry is an inter-provincial ferry service operated by Marine Atlantic, a federal Crown Corporation. It provides a year-round 96 nautical mile daily commercial and passenger vehicle link between Port aux Basques, Newfoundland, and North Sydney, Nova Scotia. Service is twice daily from mid-September through May and 2-4 times daily during the high season from June to mid-September. The

Corporation owns and operates four ice-class vessels—three passenger/vehicle ferries and a single cargo ferry. In 2009, Marine Atlantic is phasing in the operation of a fourth passenger/vehicle ferry, the MV *Vision*, which it has leased to operate the Port aux Basques to North Sydney route until 2013. The vessel is 203 metres long with a capacity for up to 531 cars. Ferry traffic brings business and employment to the Bay St. George/Port au Port coastal area.

Marine Atlantic makes approximately 2,000 ferry crossings per year between Port au Basques, NL and North Sydney, NS (Table 64). The Department of Tourism, Culture and Recreation (2008) reported a decrease in passenger (-5.3%) and passenger related vehicle traffic (-5.2%) from 2007 to 2008 (Table 64). The decline may be attributed to a decrease of 11% in non-resident auto visitors and a decrease of 3% for residents exiting the Province. The declines are in contrast to slight increases for both categories between January and December of 2007. Exiting bus traffic also decreased 3% between May and October of 2008 (Department of Tourism, Culture and Recreation 2008, 2009).

Table 64. Marine Atlantic passenger and vehicle traffic, January to December, Port aux Basques to North Sydney service.

Marine Atlantic Traffic	2008	2007	2006	% Change, '07-'08
Passengers Carried	360,942	380,966	372,187	-5.3
Passenger Related Vehicles Carried	121,029	127,683	122,046	-5.2
# of Crossings	2,079	2,100	2,086	-1.0

Source: Department of Tourism, Culture and Recreation Year-End Provincial Tourism Performance 2007 and Early Tourism Outlook 2008; Department of Tourism, Culture and Recreation Year-End Provincial Tourism Performance 2008 and Early Tourism Outlook 2009.

In May 2005, an inter-departmental Advisory Committee formed by the Minister of Transport, Minister of Natural Resources, and the Regional Minister for Newfoundland and Labrador announced a series of recommendations for improved ferry service, which included investing in the current fleet, phasing in three larger vessels between 2006 and 2011, and relocating Marine Atlantic's head office to Port aux Basques. These changes, if implemented, could provide significant benefits to the western Newfoundland and southern Labrador economy in the near future.

Strait of Belle Isle Ferry

The Strait of Belle Isle ferry is an inter-provincial ferry service that operates between St. Barbe on the Northern Peninsula to Blanc-Sablon, Quebec near the Labrador border. Woodward Group of Companies based in Happy Valley-Goose Bay, Labrador currently operates the service under contract to the government of Newfoundland and Labrador. The Woodward Group owns and operates the MV *Apollo*, a 110-metre vessel providing a drive on, drive off service. The vessel crossings operate from approximately mid-April or first of May to the second week of January each year, depending on ice conditions. The service offers one, two, or three passenger and commercial vehicle crossings each day, plus scheduled dangerous goods crossings. This service is critical to the economy of the Southern Labrador coastal area.

Passenger vehicle movements for the MV *Apollo* declined from 2003 to 2006 but rose between 2006 and early 2008, whereas commercial vehicles continued to decline (Table 65). Tour buses also declined (163 in 2006, 156 in 2007).

Table 65. Strait of Belle Isle ferry service: May to October, 2003-2008.

	2007 - 2008	2006 - 2007	2005 - 2006	2004 - 2005	2003 - 2004
Passengers	77,058	76,371	71,455	75,345	80,338
Passenger Vehicles	28,488	27,640	25,220	26,671	28,172
Commercial Vehicles	3,057	3,275	3,275	3,369	3,751

Source: Marine Services Manager's Office, Department of Transportation and Works, unpublished data update 2008.

Shipping

Shipping traffic volume and type of commodities entering and leaving the Port of Corner Brook generate economic activity in western Newfoundland and southern Labrador. Over 200 vessels arrive and depart annually from the Port (Table 66). This includes all commercial wharfs in the greater Corner Brook port except the wharf owned by The Barry Group and the marina. It also includes Coast Guard vessel traffic, which is very active in winter but less so in Corner Brook in the summer.

Table 66. Number of vessels to Port of Corner Brook, 2005-2008.

Year	Number of Vessels
2008	195
2007	233
2006	244
2005	222

Source: Operation's Manager's office, Corner Brook Port Corporation, unpublished data update 2009.

The commodities exported in greatest volume from Corner Brook in 2007 were news print, cement, and processed-frozen fish (Table 67). Oceanex Inc. provides year-round service to the Port of Corner Brook with its Halifax vessel, M.V. Sanderling. During the peak export fish season, Oceanex adds a second vessel to the Corner Brook service, the Montreal-based Oceanex Avalon.

Table 67. Commodities discharged and loaded at the Port of Corner Brook during 2007.

Commodity	Discharges	Loaded	Unit
Automobiles, Auto, Trailer, Tractors	1,756	218	Each
Boats	59		Each
Cement	12,612	6,421	Metric Tonne
Containers	44	1,042	Each
Fertilizer	50	205	Metric Tonne
Fish Processed-Frozen	493	13,566	Metric Tonne
Gasoline	88,010		Metric Tonne
Goods not otherwise specified	21,877	674	Metric Tonne
Motorcycles, Snowmobiles	4		Each
News Print	8,060	337,169	Metric Tonne
Other petroleum products & LSD	86,407		Metric Tonne
Salt, Rock Salt, Salt Cake	17,995		Metric Tonne
Secondary Fibre/Waste Paper	48,468	89	Metric Tonne
Trucks, Trailers, Buses, Mobiles	384	2,008	Each
Wood Pulp	79,489		Metric Tonne
Lumber, Timber except Plywood		320	Metric Tonne
Scrap Metal		465	Metric Tonne

Source: Operations Manager's office, Corner Brook Port Corporation, unpublished data update 2008.

The Shipping Federation of Canada is a professional association of shipowners and agents involved in overseas trade with Canada (www.shipfed.ca/). While several agents are active in the Gulf of St. Lawrence, information was not available for traffic entering ports in the western Newfoundland and southern Labrador region.

The Canadian Ship Owners' Association represents Canadian-flag ship owners (www.shipowners.ca/). There are six companies listed as members on the Association's web site, one of which is Groupe Desgagnés Inc. which operates the *MV Nordik Express*, a passenger and freight vessel that services the Quebec North Shore as far as Blanc Sablon on the border of the Southern Labrador coastal area. Another company is Algoma Tankers, a division of Algoma Central Corporation, which in 2002 used the Port of Stephenville and from 2000 to 2009 used the Port of Corner Brook several times (Algoma Tankers, St. Catharines, Ontario, Catherine Calvert, pers. comm., 2009). Canadian Steamship Lines ships stone from Lower Cove to Corner Brook and salt from Lower Cove to Corner Brook, Port aux Basques, and Auld's Cove, Cape Breton (Canadian Ship Owner's Association, Montreal, Michel Drolet, pers. comm., 2009).

3.4.9 Tourism

3.4.9.1 Tourism marketing: Tourism industries in western Newfoundland and southern Labrador have pooled resources and collaborated on a marketing strategy, called Trails to the Vikings, that promotes the western Newfoundland and southern Labrador region as a whole, in line with the provincial product development strategy. Although it does not replace established marketing brands for subregions such as the Viking Trail and the Labrador Coastal Drive, it is an attempt to avoid duplication of

effort and to utilize partnerships to market strongly the western region as a whole to the regional, national, and international marketplace.

The new membership-based organization is called the Western Destination Marketing Organization (DMO). Like the three other DMOs that have been set up in the Province, the Western DMO aims to share expertise and best practices with partners, to strengthen tourism products, and to create packaging opportunities that will create more revenue for businesses. The DMO has identified eight subregions within the Western DMO: 1) Southern Labrador, 2) Northern Newfoundland Coasts, 3) Northern Peninsula, 4) Gros Morne National Park, 5) Humber Valley, 6) Bay St. George, 7) South Coast, and 8) Southwest Coast (Destination Marketing Organization 2008).

The Federation of Newfoundland Indians commissioned a Tourism Strategy for the development of an Aboriginal Tourism Industry in the region. The top five perceived band opportunities were: 1) Sple'tk First Nations Wig Wam Point, 2) Aboriginal Showcase (Bay St. George Region Band cooperative effort), 3) Captain James Cook Historical Attraction (Bay of Island region Band cooperative effort), 4) Sandy Point Interpretation Centre Development, and 5) Lewis Hill Interpretation Development (FNI 2006).

3.4.9.2 Visitation: The Province experienced a small decrease of 1.3% in visitation for 2007 (January 1 to December 31) as compared with 2006. This is in contrast to the growth cycle experienced between 2003 and 2006, when the average annual growth was 4%. Provincial authorities attributed the 2007 decline to fewer non-resident air visitors, which offset the increases recorded in non-resident automobile and cruise visitation (Department of Tourism, Culture and Recreation 2008a).

A continued decline in visitation (-2.0%) occurred during the same time period for 2008 as compared to 2007. During 2008, increases in air visitors offset declines in automobile and cruise visitations. Automobile visitors were impacted by high gas prices as well as fuel surcharges and high rates on the Marine Atlantic ferry. The growth in air visitors was attributed in part to increased capacity (flights and seats) during the peak season.

Provincial authorities predict that 2009 will be a challenging year for tourism (Department of Tourism, Culture and Recreation, St. John's, NL, Roger Haynes, Strategic Planning and Policy, pers. comm., April 2009). Growth prospects, particularly in the short term, remain uncertain as worries pertaining to the global economic crisis continue to spread, offsetting the positive effect of declining gasoline prices. The global credit crunch and continuing stock market losses have left many Canadian and U.S. households very uncertain about general finances, including plans for travel.

Tourism in Newfoundland and Labrador depends heavily on Ontario markets (representing 34% of non-resident visitors to Newfoundland Labrador), which are bearing the brunt of the impacts of the global economic recession in Canada. The positive impacts of the federal budget 2009 stimulus package and job creation

measures in Ontario remain to be seen. In addition, economic recession and other factors will likely discourage U.S. travel to Canada in 2009, compounding the long-term decline in U.S. markets. Travellers from the U.S. represent 12% of the provincial tourism market.

Occupancy Rates

Annual occupancy rates are based on available information from providers of roofed accommodation for rent to resident and non-resident travelers. The return rate of information from providers varies according to the proportion of providers at any given time who have sent in their information about occupancy for the following year.

Based on a return rate of 91% for the western region as of March 2009, the 2008 roofed accommodation occupancy rates for the western region increased 2.4% over 2007 (Table 68). This compares with a 2.0 % increase in occupancy rate for the entire Province, based on a return rate of 96% as of March 2009. Based on this preliminary information, the 2008 average daily rate in the western region increased 3.6% compared to a 5.2% increase at the provincial level.

Table 68. Annual occupancy rates in western Newfoundland, 2006 – 2008.

	*2008p	2007	2006	% Change (07-08)
Western Region				
Occupancy Rate	41.3	38.9	37.8	2.4
Average Daily Rate	\$95.45	\$92.13	\$87.22	3.6
Newfoundland and Labrador				
Occupancy Rate	48.3	46.3	44.2	2.0
Average Daily Rate	\$106.63	\$101.37	\$98.58	5.2

*Note: p=preliminary data. Source: Department of Tourism, Culture and Recreation; Tourism Destination Management System (TDMS), Year-End Provincial Tourism Performance 2007 and Early Tourism Outlook 2008. Department of Tourism, Culture and Recreation Background Year-End Provincial Tourism Performance 2008 and Early Tourism Outlook 2009.

Occupancy rates information for RED Zones indicate highest rates for Zone 8, the Corner Brook – Deer Lake area, and lowest for Zone 5, Southern Labrador (Table 69).

Table 69. Annual occupancy in western Newfoundland and southern Labrador by Regional Economic Development Zone, 2007.

RED Zone	Total Rooms Available/Month	Total Rooms Sold	Occupancy Rate	Total Room Revenue	Average Daily Cost
Zone 10 - Port aux Basques / Doyles / Rose Blanche	63,782	23,056	36.15%	\$1,867,725.60	\$81.01
Zone 9 - Stephenville / Port au Port / Burgeo	71,668	25,532	35.63%	\$2,150,011.66	\$84.21
Zone 8 - Deer Lake / Humber Area / Corner Brook	255,503	126,772	49.62%	\$11,769,559.32	\$92.84
Zone 7 - Gros Morne Area, Viking Trail North to and including Plum Point	170,207	58,079	34.12%	\$5,290,237.77	\$91.09
Zone 6 - Viking Trail, St. Anthony South West to Plum Point, East to Roddickton/Englee	75,803	25,651	33.84%	\$2,116,824.69	\$82.52
Zone 5 - Labrador Straits (L'Anse au Clair to Red Bay)	32,961	8,843	26.83%	\$652,172.81	\$73.75
Newfoundland and Labrador	2,536,231	1,194,377	47.09%	120,672,081	\$101.03

Source: Department of Tourism, Culture and Recreation Year-End Provincial Tourism Performance 2007 and Early Tourism Outlook 2008.

Exit Survey

Results of an exit survey in 2003-04 show that the highest percentage of travel parties visit the Corner Brook – Deer Lake and the Gros Morne – Northern Peninsula areas.

Table 70. Percentage of non-resident travel parties that visited Regional Economic Development Zones in western Newfoundland and southern Labrador, June – October 2004.

RED Zone	Grand Total (%)	Mode of Travel	
		Auto (%)	St. John's Air (%)
Zone 10 - Port aux Basques / Doyles / Rose Blanche	9	32	0
Zone 9 - Stephenville / Port au Port / Burgeo	5	16	14
Zone 8 - Deer Lake / Humber Area / Corner Brook	16	39	7
Zone 7 - Gros Morne Area, Viking Trail North to and including Plum Point	16	41	8
Zone 6 - Viking Trail, St. Anthony South West to Plum Point, East to Roddickton/Englee	8	20	4
Zone 5 - Labrador Straits (L'Anse au Clair to Red Bay)	1	4	0

Source: Department of Tourism, Culture and Recreation, 2003-2004 Exit Survey Program – Highlights.

Note: Totals may exceed 100% due to multiple responses.

The exit survey of visitors is a useful indicator of the types of activities and products to which visitors to the Province are attracted. Results of the 2003-04 survey show an overwhelming emphasis on nature-based leisure activities (Table 71).

Table 71. Top 14 activities (by percent) in which non-resident visitors participated during 2004 in Newfoundland and Labrador.

Activity	Grand Total (%)	Mode of Travel	
		Auto (%)	St. John's Air (%)
Unweighted Sample	5,505	4,020	1,482
Weighted Total	125,455	33,577	91,878
Pleasure walking or hiking	80	78	81
General sightseeing (other than guided/ organized tours)	81	72	83
Visit a national, provincial or other nature park	43	66	34
Going to an ocean beach/site for beach combing, swimming	37	42	35
Nature observation -wildlife viewing	35	53	28
Nature observation – plant observation	30	40	26
Whale watching (other than boat tour)	27	33	24
Whale watching boat tour	26	20	28
Hiking in wilderness areas	25	38	19
Seabird watching (other than boat tour)	24	26	23
Sightseeing boat tour	23	24	22
Seabird watching boat tour	23	15	26
Iceberg viewing (other than boat tour)	22	27	20
Birding/bird watching	16	20	15

Source: Department of Tourism, Culture and Recreation, 2003-2004 Exit Survey Program – Highlights.

Note: Totals may exceed 100% due to multiple responses.

The Department of Tourism, Culture and Recreation plans to implement another exit survey beginning in 2009 (Dan Chaisson, Department of Tourism, Culture and Recreation, Corner Brook, pers. comm., 2009).

National park and historic site visitation

Visitation statistics for the 2007 season at Gros Morne National Park show a 1.5% increase in visitation overall but 3% fewer camper nights (visitors utilizing the campgrounds for overnight accommodation) compared to 2006 (Table 72). The number of visitors to visitor centres increased overall as well, with the newer Discovery Centre experiencing a 14% increase. There was also a 3.5% increase in the number of motorcoach visitors. Boat tour operators at Western Brook Pond and Trout River Pond reported an increase of 3% over 2006.

Table 72. Gros Morne National Park visitation (Operating Season to October), 2006 and 2007.

Gros Morne Park	2007	2006	% Change
# of Visitors (June to October)	159,138	156,776	1.5
Camper Nights	9,754	10,030	-2.8
Visitors Centres:			
Discovery Centre	27,496	24,120	14.0
Visitor Centre	42,425	42,453	-0.1
Lighthouse	16,404	17,910	-8.4
Broom Point	7,017	6,943	1.1
Total	93,342	91,426	
Motorcoach Visits	301	233	29.2
Motorcoach Passengers	10,012	7,412	35.1
Boat Tours (People)	28,178	27,419	2.8
Interpretation Programs	8,198	7,512	9.1

Source: Department of Tourism, Culture and Recreation Year-End Provincial Tourism Performance 2007 and Early Tourism Outlook 2008.

Two of the three National Historic Sites reported declines in the number of visitors during 2007 (Table 73). L'Anse aux Meadows reported an increase of 3% over 2006.

Table 73. Visitation at national historic sites in western Newfoundland and southern Labrador, 2006 and 2007.

Historic Site	2007	2006	% Change
L'Anse Aux Meadows	27,819	27,378	1.6
Port Au Choix	9,212	9,492	-2.9
Red Bay	7,977	8,462	-5.7

Source: Department of Tourism, Culture and Recreation Year-End Provincial Tourism Performance 2007 and Early Tourism Outlook 2008.

Notes: Data presented for all three sites are for the period June to October.

Provincial parks, ecological reserves, and historic sites

In general, visitors to provincial parks in or near the Bay St. George/Port au Port coastal area declined during the seven-year period 2001-2007 but fluctuated in the Bay of Islands and Southern Labrador coastal areas and increased at Burnt Cape in the Great Northern Peninsula coastal area (Department of Environment and Conservation 2008). Barachois Pond received the most number of visitors as well as registered park units, as compared with all other provincial parks in the western Newfoundland and southern Labrador region (Tables 74, 75). A registered park unit means that a camper unit (tent, trailer, or motor home) was registered for overnight. Data for the J.T. Cheeseman Provincial Park, which is just south of Cape Ray and therefore outside of the Bay St. George/Port au Port coastal area, are included because they provide further indication of visitor traffic entering the Province at Port aux Basques and likely visiting the Bay St. George/Port au Port coastal area.

Table 74. Number of visitors to provincial parks in western Newfoundland and southern Labrador coastal areas, 2001 – 2007.

Park Name	Visitor Numbers						
	2007	2006	2005	2004	2003	2002	2001
Bay St. George/Port au Port							
Barachois Pond	21,478	27,906	28,516	33,201	34,864	29,967	27,150
J. T. Cheeseman	4,653	4,942	7,399	7,309	8,748	8,970	7,401
Bay of Islands							
Blow Me Down	2,429	2,352	2,761	2526	2,705	3,351	2,331
Squires Memorial	8,556	8,061	6,156	5,911	6,025	7,260	6,987
Great Northern Peninsula							
Burnt Cape	920	887	825	789	722	555	
Southern Labrador							
Pinware River	1,026	977	1133	458	1492	1083	1257

Source: Newfoundland and Labrador Department of Environment and Conservation, Parks and Natural Areas Division, Deer Lake, NL.

The number of registered park units between 2001 and 2007 declined at some provincial parks and increased at others (Table 75). Declines were affected by a change in the reservation system, which no longer allowed booking blocks of unused days in order to hold a weekend. Gasoline prices may have also affected the results. Resident travelers account for 90% of overnight stays in provincial parks (Department of Tourism, Culture and Recreation 2007).

Table 75. Number of registered units (tent, trailer, or motor home) at provincial parks in western Newfoundland and southern Labrador, 2001 – 2007.

Park Name	Total Units Registered						
	2007	2006	2005	2004	2003	2002	2001
Bay St. George/Port au Port							
Barachois Pond	6,997	8,318	8,944	9,695	10,848	9,989	9,050
J. T. Cheeseman	1,958	2,025	2,931	2,706	3,418	2,990	2,467
Bay of Islands							
Blow Me Down	956	899	1,086	987	1,084	1,117	777
Squires Memorial	3,617	3,189	2,478	2,384	2,402	2,420	2,329
Southern Labrador							
Pinware River	460	438	497	458	663	443	419

Source: Newfoundland and Labrador Department of Environment and Conservation, Parks and Natural Areas Division.

The Point Amour Lighthouse provincial historic site in Southern Labrador received a slight increase in the number of visitors for 2007 (5,842) over 2006 (5,409). The number of visitors reported for 2008 dropped slightly to 5,797 (Department of Tourism, Culture and Recreation 2008, 2009).

Cruise ship visitation

The Cruise Association of Newfoundland and Labrador (CANAL) reported an increase in the number of port calls (i.e. visits) by cruise ships for the western Newfoundland and southern Labrador region between 2006 and 2008 (Table 76). In 2007 the region experienced nearly double the number of passengers and more than

double the estimated value for communities serving as host ports, as compared with 2006. However, the passenger count and estimated value to the region declined in 2008. The estimated value is calculated on the basis of direct and indirect benefits to the communities using averages of \$18.90 per passenger and \$11.54 per crew for small ports and \$56.00 per passenger and \$34.00 per crew for the Port of Corner Brook. Corner Brook and L'Anse aux Meadows have been the two ports receiving the most number of cruise ship visits since 2006 (Cruise Newfoundland and Labrador 2008).

Table 76. Cruise ship visits for western Newfoundland and southern Labrador coastal areas, 2006 – 2008.

Community	Number of Visits	Max Crew	Max Passengers	Estimated Value (\$)
2008				
Bay St. George/Port au Port				
Codroy Valley	2	89	198	4,768
Bay of Islands				
Corner Brook	11	2,709	5,275	387,506
Lark Harbour	3	66	38	1,479
Man O War Cove	3	66	38	1,479
Cox's Cove	4	119	133	3,886
Great Northern Peninsula				
Gros Morne National Park	1	80	140	3,568
Woody Point	6	258	344	9,476
Norris Point	5	184	162	5,183
L'Anse Aux Meadows	10	668	971	26,054
Raleigh	1	53	95	2,407
Plum Point/Bird Cove	1	53	95	2,407
Southern Labrador				
Cape St. Charles	1	63	112	2,843
Red Bay	3	191	245	6,833
Total	51	4,599	7,846	457,889
2007				
Bay St. George/Port au Port				
Codroy Valley	2	89	202	4,844
Cape St. Georges	1	38	47	1,326
Bay of Islands				
Corner Brook	11	9,668	20,462	1,499,223
Great Northern Peninsula				
Gros Morne/Woody Point	3	127	249	6,170
Port au Choix	1	38	47	1,326
L'Anse Aux Meadows	7	643	1,147	29,092
Raleigh - Burnt Cape	1	53	101	2,520
Southern Labrador				
Cape St. Charles	3	65	119	2,999
Red Bay	4	111	147	4,058
Total	33	10,943	22,668	1,551,559
2006				
Bay St. George/Port au Port				

Codroy Valley	3	125	301	7,130
Bay of Islands				
Corner Brook	6	4,454	9,012	667,144
Cox's Cove	1	53	114	2,766
Great Northern Peninsula				
Gros Morne/Woody Point	3	125	301	7,130
Port au Choix	2	72	187	4,364
Norris Point	1	125	123	3,766
L'Anse Aux Meadows	7	483	896	22,503
Burnt Cape	1	53	114	2,766
Southern Labrador				
Cape St. Charles	1	53	114	2,766
Red Bay	2	72	187	4,364
Total	27	6,242	12,619	724,700

Note: Data for number of visits based on actual port calls.

Source: Cruise Newfoundland and Labrador, data updates 2008 and 2009.

The size of the cruise ships can make a significant difference in the estimated value of a port call to a community, as illustrated by the data for the Port of Corner Brook listed in Table 77. In 2007 the passenger count reached 20,462—its highest level in the seven years reported—bringing an estimated nearly \$1.5 million into Corner Brook that year.

Table 77. Cruise ship visits (2003-2008) and scheduled visits (2009) for the Port of Corner Brook, 2003 – 2009.

Year	Number of Visits	Crew	Passengers	Estimated Value (\$)
2009	7	6,595	15,882	1,131,892
2008	11	3,152	8,014	565,006
2007	11	9,668	20,462	1,499,223
2006	6	4,454	9,012	667,144
2005	11	-	15,110	857,644
2004	6	-	11,941	677,771
2003	9	-	11,347	644,055

Source: Port of Corner Brook, data update 2008, 2009.

Smaller communities that have deep enough ports stand to benefit enormously if they have the infrastructure and accompanying facilities where visitors can spend money. It is incumbent upon communities wishing to host cruise ships to have in place the infrastructure, hospitality services, pollution prevention measures, and tourism products that can make for positive visitor experiences, protect the coastal waters, and bring income into the local economy.

Further details on cruise ship schedules for the western Newfoundland and southern Labrador region are provided in Appendix B-1 and B-2. A list of port contacts for the region appears in Appendix B-3.

3.5 RECREATIONAL ACTIVITIES

3.5.1 Recreational fishing

In Newfoundland and Labrador, recreational fishing may take place in coastal and inland waters and in three subcategories of inland waters: 1) scheduled salmon rivers, 2) scheduled rainbow trout water, and 3) non-scheduled inland waters. Inland waters are much more popular among anglers. Coastal water fishing for Atlantic salmon is on a catch-and-release basis and may be done year-round and without a licence. Regulations for salmon, trout, and other recreationally fished species and the classifications of scheduled Atlantic salmon rivers appear in the annual Angler's Guide produced by Fisheries and Oceans Canada (DFO 2008c). The Department of Fisheries and Oceans Canada is responsible for setting season dates, gear regulations, bag limits as well as collecting salmon angling statistics. The provincial Department of Environment and Conservation, Wildlife Division, is responsible for issuing angling licences and setting requirements for hiring a guide.

Salmon Fishing Areas (SFAs) of the western Newfoundland and southern Labrador region are SFA 13 (Cape Ray – Cape St. Gregory), SFA 14A (Cape St. Gregory – Cape Bauld), and SFA 14B (L'Anse au Clair – Cape St. Charles). A multi-year Atlantic Salmon Management Plan (2007-2011) that was developed with the collaboration of user groups and stakeholders contains elements of adaptive management strategies and river classification (DFO 2007a).

Of the 186 scheduled salmon rivers in Newfoundland and Labrador, 43 occur in the western Newfoundland and southern Labrador region. These rivers offer a great variety of angling opportunities in pristine settings. The Great Northern Peninsula coastal area tops the list with 22 scheduled salmon rivers, while the Bay St. George/Port au Port coastal area is second with 14 scheduled rivers. The salmon river catch data for 2007 is presented by coastal area in Table 78. Those rivers with watershed management plans in place are indicated by an asterisk.

Table 78. Salmon river catch data for western Newfoundland and southern Labrador coastal areas, 2007.

River	EFFORT (RODS)	CATCH	Catch per Unit Effort	River	RODS	CATCH	CPUE
Bay St. George/Port au Port				Great Northern Peninsula			
Bear Cove River	No data available			Trout River	59	33	0.56
Little Codroy River	118	32	0.27	Lomond River	1,370	510	0.37
Great Codroy River	3,248	1119	0.34	Deer Brook	351	329	0.94
Highlands River *	34	24	0.71	Western Brook	Closed to angling		
Crabbe's Brook *	791	162	0.2	Parsons Pond River	34	3	0.09
Middle Barachois Brook*	173	32	0.18	Portland Creek	1,366	480	0.35
Robinsons River*	1,252	371	0.3	Portland Creek Feeder	Data included in Portland Creek		
Fischell's River*	211	110	0.52	River of Ponds	1,831	745	0.41
Flat Bay Brook*	1,349	555	0.41	Little Brook Pond	8	3	0.38
Little Barachois Brook*	182	94	0.52	Torrent River *	2,077	886	0.43
Southwest* and Bottom Brooks*	1,700	395	0.23	East River (Big East River)	1,011	573	0.57
Harry's River*	1,941	470	0.24	Castors River	1,531	984	0.64
Fox Island River	245	104	0.42	St. Genevieve River	537	221	0.41
Serpentine River	753	244	0.32	West River (St. Barbe)	Closed to angling		
Bay of Islands				East River (Eastern Arm Brook)	17	0	0
Cook's Brook	Closed to angling			Big Brook	34	30	0.88
Humber River*	13,154	4622	0.35	Watts Bight Brook	21	3	0.14
Hughes Brook	85	13	0.15	Pincents Brook	21	3	0.14
Goose Arm Brook	97	34	0.35	Parker River (West River)	25	9	0.36
Southern Labrador				Bartlett's River	47	24	0.51
Forteau River	1,205	393	0.33	Upper Brook	8	0	0
L'anse au Loup River	8	6	0.75	East River (Pistolet Bay)	No data available		
Pinware River	2,136	1,680	0.79				

Source: 2008 Newfoundland and Labrador Anglers Guide.

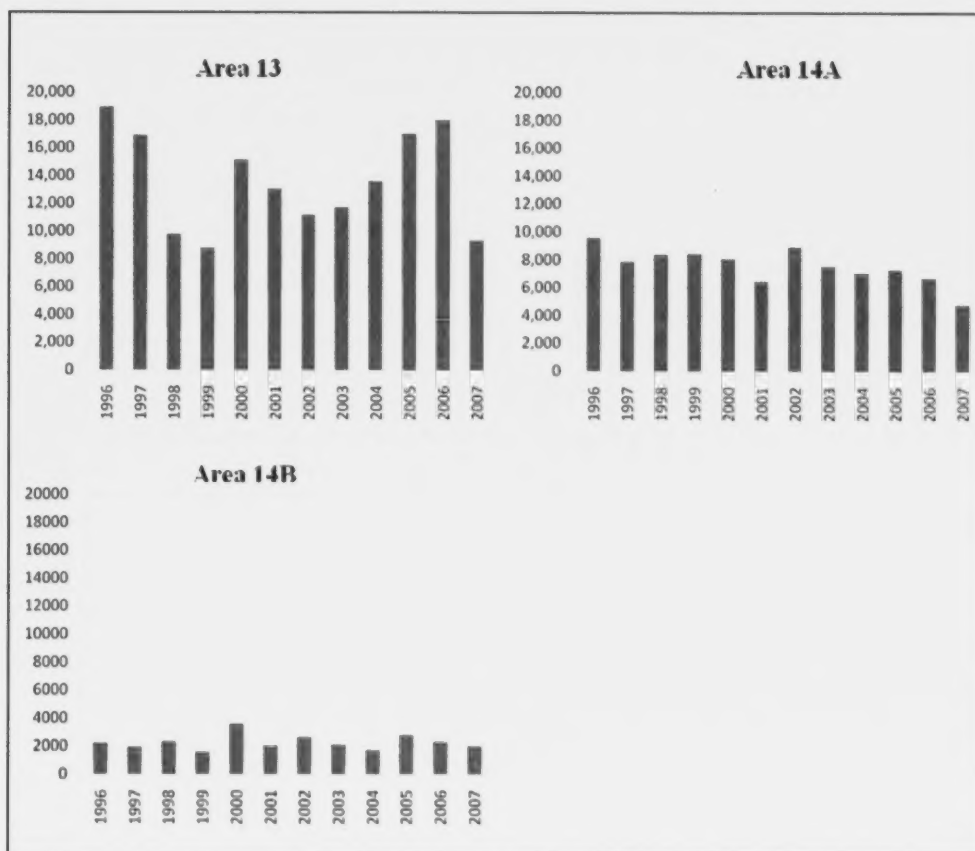
Note: *Indicates Watershed Management Plan exists for this river.

Fisheries and Oceans Canada maintains fish way counts on the Highlands, Harry's, and Torrent rivers and on Western Arm Brook.

The Bay St. George South rivers consist of the Crabbe's, Robinsons, Fischell's, Highlands, and Middle Barachois rivers. The Bay St. George North rivers consist of Harry's Southwest, Bottom, Little Barachois, and Flat Bay rivers. A committee for each of these river groupings oversees the stewardship of the rivers within the respective jurisdiction of the group. The committee for the Bay St. George South rivers is organized as an ecosystem committee under the local development association (Morely Greening, Bay St. George South ecosystem committee, pers. comm., 2008).

Atlantic salmon catch data for SFA 13, SFA 14A and SFA14B for 1996-2007 are summarized in Figure 19. These data show a decline in catches for all zones in the western Newfoundland and southern Labrador region. During this same period, the

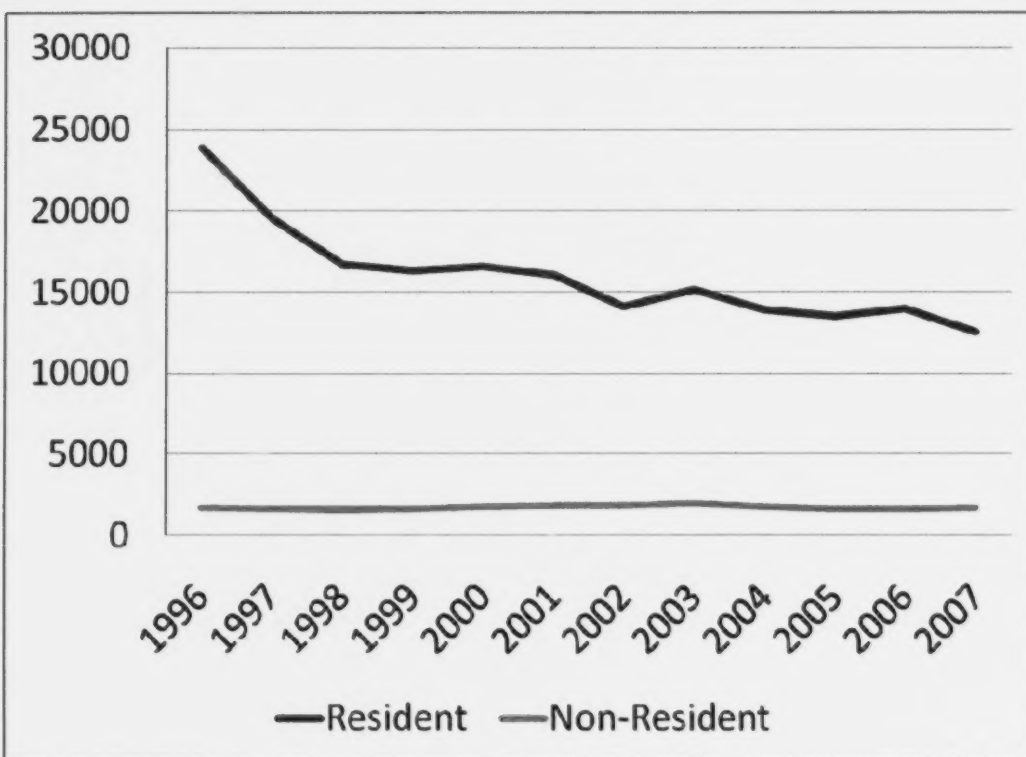
increases in catch per unit effort were recorded for several zones in northern Labrador and in northern and eastern regions of insular Newfoundland (DFO 2006b).



Note: Area 13 represents Bay St. George/Port au Port and Bay of Islands coastal areas, Area 14A represents the Great Northern Peninsula, and Area 14B represents Southern Labrador.
Source: DFO 2009b.

Figure 19. Atlantic salmon catch data by salmon management areas in western Newfoundland and southern Labrador, 1996-2007.

Overall, recreational fishing in Newfoundland and Labrador by resident anglers has declined steadily for the past ten years, as evidenced by a decline in licence sales among residents (Figure 20).



Source: DFO 2009b.

Figure 20. Licences sold in Newfoundland, 1996 – 2007.

Data on angling in Newfoundland and Labrador by residents and non-residents is available from the 2005 Survey of Recreational Fishing in Canada (DFO 2007b). The following is a sample of the information about the Province as a whole from the 2005 survey. This information was not available for the western Newfoundland and southern Labrador region or for the coastal areas.

- There were 132,266 licensed resident anglers, and 1,432 licensed, non-resident anglers.
- The average age of anglers, resident and non-resident, was 50 for males, 47 for females.
- The highest percentage of non-resident licensed anglers (34%) came from the Maritime provinces, followed by Ontario (19%), and the New England states (12%).
- Resident anglers caught over 8 million fish in Newfoundland and Labrador waters, whereas all other non-resident anglers caught less than 100,000.
- Resident anglers spent over \$206 million on major purchases and investments in Newfoundland and Labrador, whereas non-residents, all categories, spent over \$1.3 million.

A report by LGL Environmental Research Consultants produced in 1994 under the Canada/Newfoundland Cooperative Agreement for Salmonid Enhancement and

Conservation estimated the value of the recreational salmon industry to the Province in 1993 at approximately \$56.7 million, which included approximately \$52.2 million spent by residents, \$2.6 million by non-resident Canadians, and \$1.9 million by non-resident non-Canadians. On a cost per person basis, these figures amounted to \$17.58 per resident per day, \$162.22 per non-resident Canadian per day, and \$209.07 per non-resident non-Canadian per day. The study also found that if the resource was managed better, anglers would not mind paying about double the amount they were currently spending. (LGL Limited 1994).

Another study conducted in the late 1990s focused on the economic value of the Atlantic salmon sport fishery on the Humber River, which is a well-known river for Atlantic salmon and is located in the Bay of Islands coastal area. The report by Gardner Pinfold Consulting Economists Limited (1997) concluded that in 1996 anglers spent an estimated \$1.5 million dollars to fish the Humber, \$0.7 million of which was spent by residents and \$0.8 million by non-residents (Gardner Pinfold Consulting Economists Limited 1997, Whoriskey and Glebe 1998).

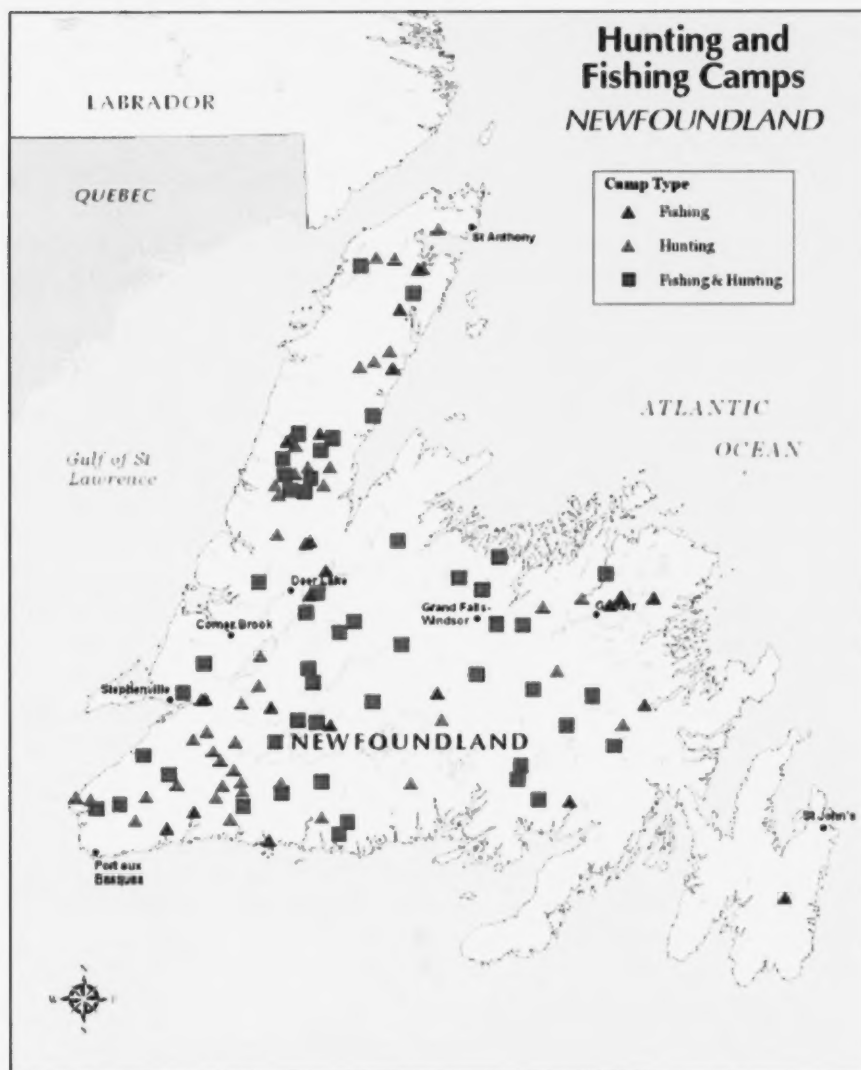
The value of recreational salmon fishing to Newfoundland and Labrador has risen greatly since the time of the LGL and Gardner Pinfold studies. Surveys in recent years conducted by the Department of Tourism, Culture and Recreation and by the Newfoundland and Labrador Outfitters Association reveal that the annual economic contribution of outfitting to the Province can approximate or exceed \$30-40 million and is comparable to resource-based sectors such as agriculture and forestry. This figure is based on estimates for annual gross revenues by outfitting companies, combined with transportation, licence fees, and miscellaneous expenses associated with the experience (Department of Tourism, Culture and Recreation 2006a).

While salmon catch data for western Newfoundland may be showing a decline, the estimated value of recreational fishing and tourism in general is increasing. At a conference held in February 2009 in Corner Brook, which was sponsored by the Department of Tourism, Culture and Recreation and Hospitality Newfoundland and Labrador, representatives from the Department stated that tourism currently brings an estimated \$800 million into the Province each year and that value is estimated to double in ten years (Department of Tourism, Culture and Recreation 2009). Recreational fishing is one component of that tourism value. It was also reported at the conference that western Newfoundland is considered to have the second largest cluster of tourism operators in the Province (Atlantic Salmon Federation, Corner Brook, NL, Don Ivany, pers. comm., 2009).

Outfitting and guiding is a major business in the western Newfoundland and southern Labrador region. Membership in the Newfoundland and Labrador Outfitters Association (NLOA) lists 153 outfitters for Newfoundland and Labrador. Approximately 60% of all outfitting camps owned by members are located on the Northern Peninsula (NLOA, Pasadena, NL, Melissa Byrne, pers. comm., 2009).

As Figure 21 illustrates, a high proportion of outfitting camps in the Province are located in western Newfoundland. Recreational activities such as fishing and hunting are an important aspect to the economy of that region.

Atlantic salmon packages are the most commonly offered fishing packages, offered by nearly 75% of fishing outfitters, whereas brook trout packages are offered by 61%. The average price per day in Newfoundland and Labrador for an Atlantic salmon package in 2005 was estimated at \$350 US; the average price of a one-week fishing trip was calculated as \$2,450 for salmon and \$2,310 for brook trout (Department of Tourism, Culture and Recreation 2006a). The outfitting industry is seeking ways to improve products and marketing so as to realize even greater benefits to the industry stakeholders.



Source: Department of Tourism, Culture and Recreation 2006b.

Figure 21. Hunting and fishing camps in Newfoundland, 2006.

3.5.2 Hunting

The Newfoundland and Labrador Department of Environment and Conservation, Wildlife Division, is tasked with managing populations of big and small game. Moose, caribou, and bear are hunted in the western Newfoundland and southern Labrador region. Regulations for hunting and trapping of all game are described in the provincial Hunting and Trapping Guide for 2008 (Department of Environment and Conservation 2008c).

Enforcement of wildlife regulations (and federal legislation where empowered) is the responsibility of the Department of Natural Resources. Enforcement officers are authorized to enforce provisions under the Migratory Birds Convention Act and Regulations, the Endangered Species Act, and the Wilderness and Ecological Reserves Act and Regulations.

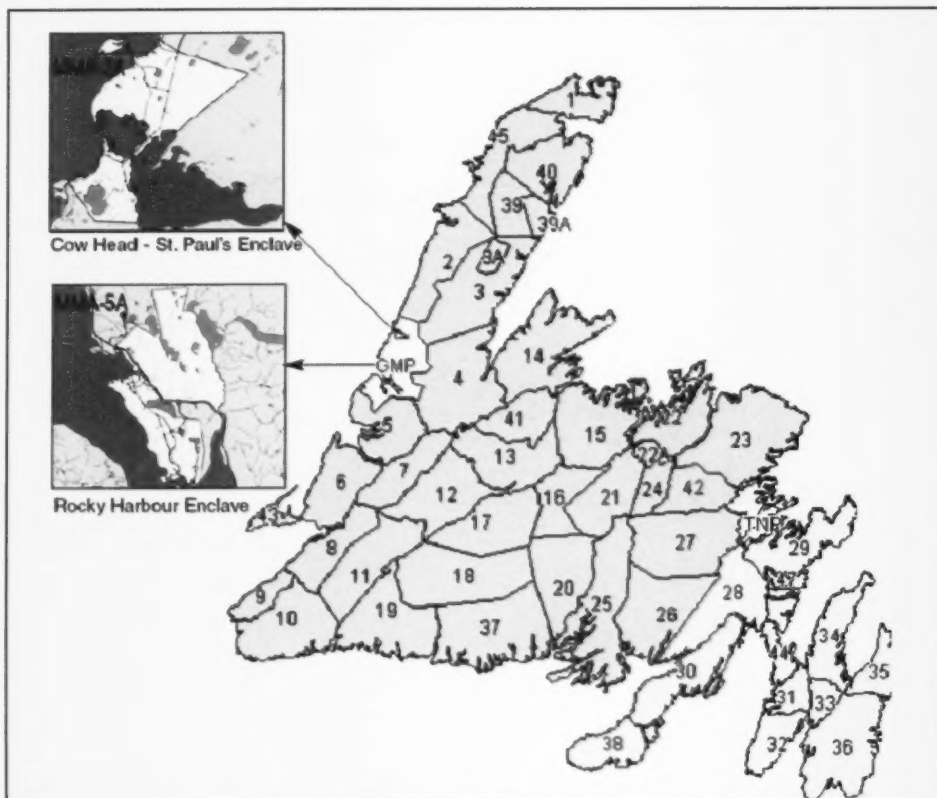
Recreational hunting for game is a big part of the economy of Newfoundland but its impact on the ocean and coastal areas is more of an indirect nature, providing business to hotels, restaurants, gasoline stations, and stores. As described in the previous section, a significant outfitting industry operates in the western Newfoundland and southern Labrador region, bringing big game hunting opportunities to non-residents from Canada, the U.S., and other countries. Figure 21, (shown above) by the Department of Tourism, Culture and Recreation shows more than 18 hunting camps in the western Newfoundland region (Department of Tourism, Culture and Recreation 2006b).

3.5.2.1 Big game:

Moose

Moose quotas are set for Moose Management Areas of insular Newfoundland. Several Moose Management Areas occur within the Bay St. Georges/Port-au-Port and Great Northern Peninsula coastal areas (Figure 22).

Table 79 presents moose hunting data for 1996 through 2007 for eight Moose Management Areas that occur within the coastal areas of western Newfoundland. In most management areas, the number of licences issued over the eleven-year period has increased, suggesting that the value of moose hunting to the local and regional economy has been increasing.



Source: Hunting and Trapping Guide, 2008-2009, Newfoundland and Labrador.

Figure 22. Moose Management Areas in Newfoundland, 2008.

Table 79. Moose licences and hunting success in Moose Management Areas of western Newfoundland and southern Labrador, 1996-2007.

Year	Either Sex		Male Only		Non-Resident		Either Sex		Male Only		Non-Resident	
	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)
	Management Area 9						Management Area 8					
2007	100	76.56	100	70	202	96.3	356	76.97	356	70.15	97	
2006	100	79.27	100	68.7	182	92.5	369	81.48	370	70.71	75	91.64
2005	150	67.9	150	57.35	196	92.31	369	74.25	370	69.4	77	
2004	150	60.27	150	57.46	199	90.91	369	69.47	370	57.89	70	
2003	150	66.03	150	54.1	209	84.51	369	75.64	370	70.57	86	
2002	148	67.51	148	62.94	200	83.1	364	76.83	365	64.77	61	86.14
2001	145	70.44	145	72.14	200	89.16	363	76.57	364	67.71	61	
2000	144	71.17	144	66.68	195	94	361	72.34	361	57.76	63	
1999	150	72.65	150	69.55	188	79.6	369	73.39	370	56.27	72	67.8
1998	150	65.7	150	71.5	189	80	369	78	370	65.2	62	83
1997	200	74	200	63	201	85.6	369	77	370	58.7	61	72
1996	200	72	200	62.8	202	81.7	434	81	435	62.7	56	73

Year	Either Sex		Male Only		Non-Resident		Either Sex		Male Only		Non-Resident	
	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)	Licences	Adjusted Success (%)
	Management Area 43						Management Area 6					
2007	300	72.28	150	59.01			637	77.53	537	70.01	82	83.44
2006	300	81.56	150	67.08			512	78.02	512	76.83	80	94.18
2005	400	78.89					487	68.72	487	65.21	69	85.52
2004	400	83.79					462	72.89	462	82.86	76	80.97
2003	100	84.73					461	80.32	462	73.12	76	87.89
2002	97						442	75.78	442	57.29	49	79.02
2001	92						449	76.74	450	65.73	76	87.19
2000	92						450	77.14	450	55.98	72	50.2
1999	50	68	50	72			462	72.57	462	58.89	77	
1998	30		30				462	74.1	462	64.8	62	93
1997	10		10				473	75.6	473	64.8	48	90
1996	10		10				426	84	426	56.5	49	90
	Management Area 5						Management Area 2					
2007	634	72.34	484	68.51	41		742	81.14	742	76.08	28	77.47
2006	534	82.39	484	82.45	32		742	81.54	742	70.03	24	79.17
2005	534	83.02	484	71.64	39		742	80.1	742	75.73	24	91.67
2004	384	81.11	384	76.05	38		742	81.57	742	74.8	20	
2003	383	83.78	383	81.2	37		692	87.21	692	81.95	21	86.36
2002	374	81.67	374	77.12	32		671	87.14	672	85.59	17	88.24
2001	372	87.58	372	76.96	32		629	86.34	629	81.96	16	100
2000	372	84.1	372	79.27	34		625	89.05	625	82.56	19	100
1999	384	86.38	384	77.93	29		642	85.23	642	80.63	18	76.5
1998	384	84.5	384	74.7			642	87.6	642	80.2		
1997	100	76.6	560	75.3			592	91	592	89.3		
1996	85	85.4	515	78.7			400	96.5	400	90.5		
	Management Area 45						Management Area 1					
2007	716	77.09	716	72.32	108	100	491	86.72	92	84.03	42	
2006	770	81.47	670	73.91	102	96.59	344	86.87	344	85.41	37	
2005	770	74.69	570	74.14	100	89	294	79.59	294	88.14	33	83.7
2004	520	82.73	520	86.31	86	94.23	244	94.97	244	81.28	30	
2003	470	84.42	470	88.74	64	92.26	194	86.91	194	85.99	33	
2002	406	84.08	406	85.17	60	97.85	185	90.49	185	88.1	17	
2001	362	84.21	363	86.49	60	98.75	187	91.55	187	83.64	13	
2000	352	86.35	352	82.51	61	96.6	191	91.55	191	84.75		
1999	295	86.05	295	88.91	63	90.5	200	90.92	200	86.93		
1998	220	87.9	220	86.8	61	96	175	89.2	175	89.9		
1997	206	85	206	85	38	92	175	94.8	175	87.2		
1996	209	89	209	91	33	94	150	96.1	150	91.9		

Source: Wildlife Division, Department of Environment & Conservation 2009b.

Caribou is a popularly hunted game species for both residents and non-residents. Figure 23 presents a map of the caribou management areas for insular Newfoundland. In southwestern Newfoundland, caribou are managed east of the Trans-Canada Highway. For the western Newfoundland and southern Labrador region, caribou are common along the Great Northern Peninsula, within Caribou Management Areas 69 and 76.

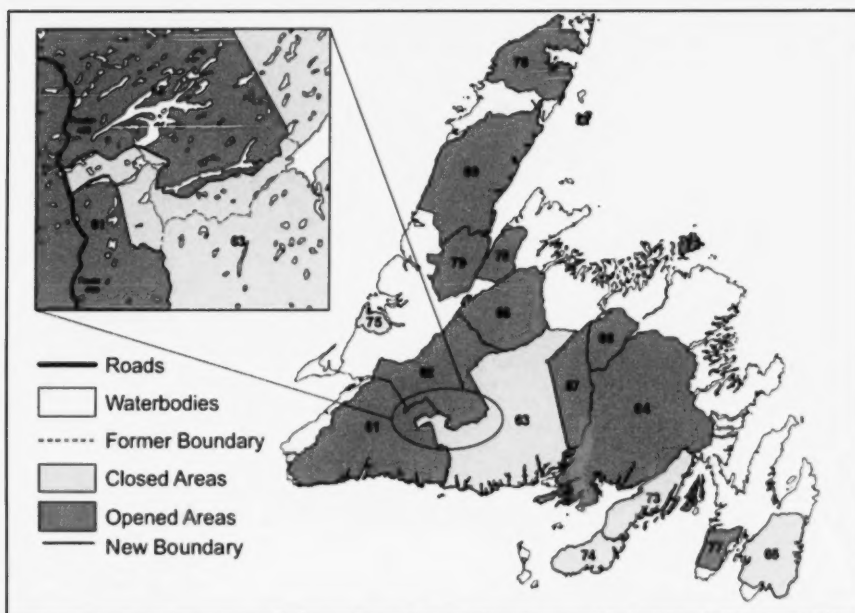


Figure 23. Caribou Management Areas in Newfoundland, 2008.

Source: Hunting and Trapping Guide, 2008-2009, Newfoundland and Labrador.

Table 80 presents caribou hunting data for Caribou Management Areas 69 and 76 from 1996 through 2007. Results show a decline in the adjusted hunting success for 2007 as compared to 2006. The number of licences sold to both non-residents and residents also declined in 2007. With the state of the North American and global economies in poor shape during 2009, the outfitting industry in western Newfoundland, particularly the portion catering to non-resident caribou hunters, is likely to experience challenges in the near future.

Table 80. Caribou licences and hunting success in Caribou Management Areas 69 & 76 , 1996-2007.

Year	Either Sex		Male Only		Non-Resident	
	Licences	Adjusted Success (%)	Licences	Adjusted Success	Licences	Adjusted Success (%)
Management Area 69						
2007	131	63.23	0		186	63.34
2006	245	81.94	0		249	73.26
2005	245	74.39	0		227	70.27
2004	245	75.97	0		225	75.76
2003	245	73.6	0		231	75.9
2002	230	86.69	0		226	75.32
2001	231	87.82	0		232	74.7
2000	232	88.48	0		243	74.5
1999	225	88.6	18	99.5	194	80.9
1998	150	91	18	72	188	83
1997	125	91	69	87	114	96.5
1996	70	90	31	86	74	91.7
Management Area 76						
2007	200	65	74	35.68	34	
2006	250	79.26	206	61.36	48	
2005	250	74.27	206	51.25	52	
2004	250	74.79	206	83.32	64	80.27
2003	250	72.1	206	67.1	51	
2002	230		189		47	86.3
2001	239		177		47	80.02
2000	215		212	85.1	52	
1999	15		176	73.3	35	
1998	8		96		26	84.6

Source: Department of Environment & Conservation, Wildlife Division, 2009b.

Black Bear

Black bear is also hunted in western Newfoundland and southern Labrador. Black bear harvest data were not available for the specific region or coastal area and are presented for insular Newfoundland from 1996 through 2007 (Table 81).

Table 81. Black bear harvest data for insular Newfoundland, 1996-2007.

Year	Licence Sales			Total Estimated Harvest*	Adjusted Success %
	Resident	Non-Resident	Total		
2007	3,722	901	4,623	591	6.4
2006	3,158	938	4,096	605	7.4
2005	3,216	1,001	4,217	558	13.2
2004			4,185	437	10.4
2003			4,674	530	11.3
2002			3,554	422	11.9
2001			3,527	355	10.1
2000			3,775		
1999	n/a	n/a	0		
1998	2,503	813	3,316	497	12.4
1997	2,570	705	3,275	350	5.3
1996	3,385	687	4,072	515	6.3

Note: *Estimated harvest based on a non-respondent success rate = 1/2 the success rate of respondents.

Source: Department of Environment & Conservation, Wildlife Division 2009.

3.5.2.2 Migratory birds: The hunted bird species and open seasons in the Western and Northern Newfoundland and the Southern Labrador Migratory Game Bird Coastal Zones are posted in the provincial Hunting and Trapping Guide, published by the provincial Department of Environment and Conservation each year. The main groups of birds hunted in coastal zones are the seaducks (eiders, scoters, and Long-tailed Ducks), common and thick-billed murres, mergansers, geese, and snipe. Mergansers, geese, and snipe are also hunted in inland areas. There is no open season for Harlequin Ducks.

Harvest estimates per year were available for select species but only for the island portion of Newfoundland as a whole and for all of Labrador. Data were not broken down by coastal areas.

Common and thick-billed murres (referred to by residents of the Province as "turrs") are seabirds that have been hunted in Newfoundland and Labrador since early settlement. At the time of Confederation, residents of the newly formed province were allowed an exemption to the Migratory Birds Convention, which classifies Common and Thick-billed murres as non-game. Residents of the Province are the only people in North America, other than Aboriginal peoples, who legally can hunt turrs.

The turr hunt, pursued traditionally for food, has become recognized in recent years as a recreational activity. It is generally known, and substantiated by studies conducted by Canadian Wildlife Service, that fewer people engage in turr hunting today than 30 years ago—a trend particularly evident in the younger generation. Turr hunting is still pursued in coastal areas of western Newfoundland and southern Labrador.

The daily bag limit for turrs is 20 and the possession limit is 40. There is no season limit. The use of lead shot is allowed exclusively for turrs. In recent years, annual

harvests for the entire Province may have surpassed 300,000 birds and this estimate is considerably less than harvest levels that were estimated in decades past. Harvest estimates were not available for the western Newfoundland and southern Labrador region.

Two hunting zones for turrs occur in the region: 1) Zone 3 stretches from Cape Ray to Cape St. Gregory and 2) Zone 2 encompasses all the coastal areas of the region to the north. The hunting dates for Zone 2 are generally around early October to late January and for Zone 3 around late November to mid-March. The seasons occur within the same approximate dates each year and are designed to take into consideration the migratory patterns of turrs along the shores of the Province.

Providing adequate surveillance along the extensive coastline has long been a considerable challenge to enforcement officers for migratory bird regulations. Selling of turrs and eider ducks is strictly prohibited.

Other information about the turr hunt is posted on the internet at www.cws-scf.ec.gc.ca/publications/reg/index_e.cfm.

A Migratory Game Bird Hunting Permit is required to hunt migratory game birds and turrs. The sale of Migratory Game Bird Permits in Newfoundland and Labrador is an indicator of hunting activity.

In Newfoundland and Labrador, Migratory Game Bird Permits are sold mostly in offices of Canada Post. The sales are tracked by forward sortation area (FSA), a classification used by Canada Post that is represented by the first three letters of a postal code as appear in Figure 24. Permit sales are recorded by the FSA of their sale.



Source: Canada Post 2009.

Figure 24. Forward sortation areas in the western Newfoundland and southern Labrador region, 2009.

Migratory Game Bird Permit sales from 2004 to 2007 are presented in Table 82. These data may be lower than actual as they do not take into consideration those permits for which postal codes did not get recorded. It is not surprising that among these FSAs, the highest proportion of sales were from the AOK area, given that the area encompasses a large geographic region, including White Bay, St. Anthony, and the Labrador Straits—all areas where turr and waterfowl hunting occur. The region represented by the five FSAs that encompass the western Newfoundland and southern Labrador region take in just under one quarter of the permit sales recorded for the entire Province.

Table 82. Migratory Game Bird Permit sales by Forward Sortation Area, 2004-2007.

Area	2007	2006	2005	2004
AOK	2,723	2,635	2,476	2,679
AOL	95	90	91	84
A2H	224	217	172	217
A2N	53	54	48	63
AON	511	534	497	497
western Newfoundland and southern Labrador Region	3,606	3,530	3,284	3,540
Newfoundland and Labrador	15,154	14,135	13,383	14,644

Source: National Wildlife Research Centre, Canadian Wildlife Service 2009.

3.5.3 Other recreational activities

There is a growing interest in a wide variety of marine related recreation, particularly in the Bay of Islands and Gros Morne National Park in the Great Northern Peninsula coastal area. An overview report for the region that was produced in 2001 describes 13 marine and coastal recreational activities and their considerations for coastal management planning (Nicol 2001).

Sea kayaking, in particular, has been growing in popularity among residents as well as visitors. While much of the outer shoreline of western Newfoundland and southern Labrador is exposed to winds and surf that make kayaking treacherous at times, there are numerous bays, extensive arms, and sheltered inner ponds that afford excellent paddling along with spectacular scenic views. Table 83 lists a few of the sea kayaking routes by coastal area and their approximate distances. Experienced guides who have been working in the region for more than a decade can provide more detailed descriptions and expert advice on routes and the issues that sea kayakers may encounter along the way. Some may be listed in the most recent tourism traveller's guide to the Province (Department of Tourism, Culture and Recreation 2008b).

Table 83. Sea kayaking routes within western Newfoundland and southern Labrador coastal areas.

Sample Sea Kayak Routes	Distance	Duration
Bay St. George/Port au Port		
Indian Head to Bay St. George	14 km Little Port Harmon to Rothsey Bay and return	3-4 hours
Cape St. George	15 km one-way	3.5-5 hours
Bay of Islands		
Bay of Islands	1-200 km	1 hr.-5 days
Great Northern Peninsula		
Cape Bauld - Quirpon Island	7 km	1-3 days
Portland Creek to Portland Creek outer pond	22-35 km return	1-2 days
Portland Creek to east extreme of inner pond and outer pond	50-70 km	2-4 days
Parsons Pond	24 km return	1-2 days
St. Pauls Inlet	30 km return, shoreline	1-2 days
Western Brook Pond	60 km, complete shoreline	1-3 days
Rocky Harbour to Shallow Bay	40 km	1-2 days
Shallow Bay	2-10 km	1 day
Bonne Bay, East Arm, South Arm, or Mouth of Bay	10-40 km, depending on route	1-4 days any trip
Woody Point to Trout River	30 km	1-3 days
Trout River to Green Garden campground (return)	12-20	1-3 days
Trout River Pond	39 km entire pond return	1-2 days

Notes: Data supplied for the purposes of this report and should not be relied upon for trip planning.

Source: Redmond, K. and D. Murphy 2003.

Yachting is focused principally in the Bay of Islands and to a lesser extent the Gros Morne National Park area. The Bay of Islands Yacht Club has been active for many years. The waterfront at Norris Point and a new inn at Neddy's Harbour are attracting boaters to the Bonne Bay area. There is a Humber Valley Rowing Club that uses a section of coastline near Brakes' Cove in Humber Arm (Nicol 2001).

Scuba diving as a sport has been popular in the Bay of Islands, Port au Port Bay, and in Port aux Choix. "Wreck diving" is becoming more popular, although the Provincial Archives Division is concerned about damage to wrecks that can have great historic and cultural importance (Martha Drake, Provincial Archaeologist, Heritage Division, Department of Tourism, Culture and Recreation, pers. comm., 2008).

The dramatic coastal scenery of the western Newfoundland and southern Labrador region and the abundant opportunities for viewing whales and icebergs are some of the attractions that make the region popular for sightseeing and leisure hiking. Over decades, local communities combined have been pouring hundreds of thousands of dollars into the construction and signage for coastal trails from the Codroy Valley estuary to the headlands of the Labrador Straits. An inventory of trails would likely form a large database of information.

One of the two best places for bird watching in the entire Province is the Codroy Valley estuary and the municipal wetlands of Stephenville Crossing. A bird checklist for the Codroy Valley is available through the Codroy Valley Area Development Association (Montevecchi 1998) and the web site of the Town of Stephenville

Crossing maintains a rare bird list that includes the Western Reef Heron that visited the town's wetlands in 2005 (<http://www.townofstephenvillecrossing.com/>). The Strait of Belle Isle ferry crossing is a hot spot for pelagic seabirds as well as whales that funnel through the Strait. Whale watching in general is good throughout the western Newfoundland and southern Labrador region, with some of the better known areas for viewing being the vicinity of Gros Morne National Park, Daniel's Harbour, the L'Anse Amour Lighthouse, and the Strait of Belle Isle ferry crossing. Nonetheless, whale watching can occur in surprising places, such as the harbour of Codroy, where a young beluga whale visited for several days in 2003. One of the more common areas for whale strandings has been along the shores of Southern Labrador.

Water quality issues related to wastewater disposal have restricted swimming and recreational gathering of shellfish in specific beach areas of some communities. All-terrain vehicle (ATV) use is known to be a threat to Piping Plover nesting habitat in the Stephenville Crossing and Codroy Valley areas, and vehicle use in general can threaten rare and endangered plants in portions of the limestone barrens of the Great Northern Peninsula. Recreational activities must be managed on a local scale and in collaboration with local stakeholder groups so as to increase public awareness, build support, and avoid irreversible harm to the natural and cultural heritage that is vital to the region's economy and culture.

4.0 CULTURAL FEATURES AND ACTIVITIES

4.1 EARLY OCCUPATION

Newfoundland's archaeological record has revealed that before the arrival of the Norse during the 11th century, Maritime Archaic, Paleo-Eskimo, and ancestors of the Beothuk people had settled in Newfoundland and that the first two Aboriginal groups had settled in the region of Southern Labrador. A comprehensive record of early occupation in the western Newfoundland and southern Labrador region can be found at The Rooms Provincial Archives in St. John's, Newfoundland. For the purposes of this report, a short list of early peoples of the western Newfoundland and southern Labrador region and a sample of major archaeological sites within the region appears in Table 84. For additional information and locations of sites, readers should consult the following agencies and offices: Department of Tourism Culture and Recreation, Culture and Heritage Division, Provincial Archaeology Office, and Parks Canada at Gros Morne National Park.

Table 84. Early occupation and presence of archaeological sites in western Newfoundland and Labrador.

People/Culture	Years of Occupation	Major Archaeological and Historic Sites
Maritime Archaic	7500 - 3000 BP	Burial mound in L'Anse Amour, Southern Labrador, and massive burial site at Port au Choix
Early Paleo-Eskimo	3800 - 1900 BP	Port au Choix National Historic Site of Canada
Late Paleo-Eskimo	2500 - 1100 BP	
Intermediate Indians	3500 - 2000 BP approx.	
Beothuks	xxx - 1829	
Thule Inuit	800 AD - modern Inuit	Strait of Belle Isle region
Mi'kmaq	400 BP - present	See collection at Museum in St. George's
Innu	xxx - 19 th century	Recorded history
Inuit	xxx - 19 th century	Recorded history
Norse	11 th century AD	L'Anse aux Meadows
Métis	18 th century - present	Southern Labrador
Basque	14 th century	Red Bay, Labrador; many other known sites
French	16 th century - present	Many sites along the French Shore
English	16 th century - present	Corner Brook, Plum Point, Southern Labrador

Note: BP (Before Present).

Source: Provincial tourism guidebooks and information pamphlets.

Archaeologists have confirmed a number of Beothuk sites and a late eighteenth-century Inuit site at the tip of the Northern Peninsula from the post-contact period (Tompkins 2004). No pre-contact sites for the Mi'kmaq have been found in Newfoundland, and although some experts argue that the Mi'kmaq people could not have crossed from Cape Breton to Newfoundland without the aide of European vessels, others are in agreement, as are many Mi'kmaq, that they would have had the capacity to cross from Cape Breton (possibly using St. Paul Island) to Newfoundland using their own canoes.

4.2 ABORIGINAL CULTURE

In recent years there has been much interest among the Mi'kmaq bands of western Newfoundland to revive their lost culture. This is being done in an organized fashion in the celebration of Aboriginal Day on June 21 of each year. The 2008 ceremonies in the Port au Port and Bay St. George area involve sunrise ceremonies, religious services of Mass and prayer, dances, ceremonial exchanges, and feasts. One of the main objectives of the celebration is to build awareness of the importance Aboriginal heritage and to teach the young people about the traditions of their culture.

Throughout the year, members of bands in the Port au Port, Bay St. Georges, and Corner Brook areas gather to share their knowledge about the various ceremonies, music, crafts, and language that are important to their tradition. Some of these are listed in Table 85. The language is not spoken in Newfoundland nowadays but songs are sung so as to familiarize people with the language as best as possible.

Table 85. Some traditional activities of the Mi'kmaq of western Newfoundland.

Activity
Drumming: symbol of spiritual strength
Traditional songs and language
Smudging: a form of blessing or cleansing
Pipe ceremony: exchange information
Pow-wows
Sunrise ceremonies
Sunset ceremonies
Story telling
Talking circles
Medicinal uses of plants
Regalia: special native garments
Crafts
Drum-making
Basket weaving
Gift of eagle feather: high honour
Rock carving or petroglyph
Dreamcatcher: ensures good dreams

Source: information pamphlets from Miawpukek Mi'kma'wey Mawi'omi (Conne River), band web sites, and band members per. comm. 2008.

Since the majority of members of the Labrador Métis Nation live outside of the Southern Labrador coastal area, a description of the traditional activities associated with the Inuit-Métis culture of Labrador is not included in this report.

4.3 ABANDONED COMMUNITIES AND STRUCTURES

Western Newfoundland and southern Labrador have experienced dramatic fluctuations in populations over the past 150 years. Communities have experienced both growth and decline due to a range of socio-economic and political factors, both domestic and global, spanning two centuries. These include world wars and the introduction of rail transportation. The final section of the Newfoundland Railway and the railway line to Stephenville Crossing were completed in 1898. Other influences are the Trans-Canada Highway (completed around 1966) government re-location programs (1965-1970), and the closure of the cod fishery in 1992. The latter was probably the greatest influence in recent years.

There are at least 30 abandoned communities in the western Newfoundland and southern Labrador region (Table 86). Information on these communities may be found in a gazetteer by Mobilewords (1998), based on information from the Encyclopedia of Newfoundland and Labrador (1984). Footprints of abandoned dwellings can still be found along the coasts of Newfoundland (Dan Murphy, Itinerant for Outdoor Education, Western School District, pers. comm., 2005). The height of settlement in western Newfoundland and southern Labrador would have been during the period of about 1900 to 1920.

Table 86. Abandoned communities in western Newfoundland and southern Labrador coastal areas.

Bay St. George/Port au Port	Great Northern Peninsula
1. Grandys Brook	2. Belle
3. Sandy Point	4. Gads Harbour
5. Georges Lake	6. Jack Ladder
7. McDougalls Gulch	8. Lobster Cove
9. Fischells	10. Lomond
11. Harrys Brook	12. Mill Cove
13. Serpentine	14. Seal Cove
Bay of Islands	15. St. Josephs Cove
16. Bottle Cove	17. Stanleyville
18. Brakes Cove	19. Jerrys Nose
20. Little Port	21. L'isle Rouge
22. Penguin Arm	23. Long Point
24. Voys Beach	25. Tea Cove
26. Woman Cove	27. Keppel Island
Southern Labrador	28. Spirity Cove
29. Frys Cove	
30. East St. Modeste	

Source: Newfoundland and Labrador Abandoned Communities Index, <http://www.willow-house.com/gazfree/default.htm> 2008.

In addition to abandoned communities, sections of many existing communities that were once a hub of activity are all but devoid of buildings today. This would be especially true of working harbours that once were crowded with wharves, stages, and sheds, as well as the small lumber mills that existed along rivers and in the more forested areas of the region. Exhibits at Broome Point in Gros Morne National Park and in communities such as West Ste. Modeste in Southern Labrador attempt to recreate the working architecture of the fishing and forestry industries.

The sites, artifacts, and stories that are associated with abandoned communities and historic structures are of growing interest to local communities in the region.

4.4 LOCAL/REGIONAL MUSEUMS

The many small museums of western Newfoundland and southern Labrador are treasure troves of local artifacts and information. The collections can be much more varied and eclectic than those found in national and provincial museums and have often been assembled as a labour of love by residents of the local communities. Many interpret themes and historical happenings that are often overlooked by the mainstream establishments, such as the role of women in the fishing industry and the practice of medicine at clinics and cottage hospitals. Table 87 lists the small museums of western Newfoundland and southern Labrador by coastal area.

Table 87. Museums of western Newfoundland and southern Labrador coastal areas.

Museum	Location	Description/Features
Bay St. George/Port au Port		
Cape Ray Lightkeeper's House Museum	Cape Ray	The museum showcases artifacts from the Dorset Eskimo culture.
Grand Codroy Wildlife Museum and Taxidermy	Doyles	The Grand Codroy Wildlife Museum and Taxidermy is the largest Wildlife display in eastern Canada. Also find a petting zoo and taxidermy studio.
Ktaqmkuk Mi'Kmaq Cultural / Historic Museum	Barachois Brook	The community of St. George's is an area rich in Mi'kmaq history.
Exhibit of Mi'Kmaq people of Newfoundland.	Historic Courthouse, St. Georges	Interpretive panels, artifacts and videos celebrating the Mi'Kmaq.
Bay of Islands		
Corner Brook Museum & Archives	Corner Brook	The Corner Brook Museum & Archives celebrates and preserves the rich history of the area.
Great Northern Peninsula		
Museum of Whales and Things	Port au Choix	This facility features a craft shop with gifts made by locals, as well as exhibits including one with a 46-foot sperm whale skeleton.
Our Lady of Mercy Museum	Port au Port	Situated beside one of the largest wooden structures in Atlantic Canada, Our Lady of Mercy Church, this small museum showcases artifacts, fossils and photos of the Bay St. George area.
Dr. Henry N. Payne Community Museum	Cow Head	This seasonal museum holds themed exhibits on the cultural heritage of this coastal community that was settled in 1816.
Norris Arm Heritage Museum	Norris Arm	Featuring a history of Norris Arm, this museum offers an airport hangar, an exhibit on the logging industry and a Palaeo Eskimo artifact exhibit.
Port au Choix Heritage Centre	Port au Choix	Tools, fishing equipment, furniture, photos and documents that focus on the history of Port au Choix and the Igornachois region are on exhibit at this centre.
Jenniex House	Norris Point	This 79 year old typical salt box house overlooks beautiful Bonne Bay. It has local artifacts and a craft store with local handmade crafts.
Bird Cove Interpretation Centre	Bird Cove	This centre contains local historical information in the Community Heritage Room, the Rock & Fossil Room, the "Folk of the Sea," and Captain Cook exhibits.
Nurse Myra Bennett Heritage House	Daniel's Harbour	Complete with period furniture, medical instruments, and personal memorabilia, the museum consists of restored 1920's-period medical clinic, kitchen, pantry, dining room, parlour, four bedrooms and a bathroom.
Trout River Fishermen's Museum	Trout River	This museum contains displays demonstrating Trout River's fishing community history. Photos, artifacts and equipment are available for viewing.
Torrent River Salmon Interpretation Centre	Hawkes Bay	The Torrent River Salmon Interpretation Centre tells the story of the Torrent River and how community partnerships shaped it into what it is today.
Southern Labrador		
Labrador Straits Museum	Between Forteau and L'anse au Loup	The museum includes a 10-foot long komatik, a figurehead from the wreck of a fishing schooner and an exhibit of reproduction artifacts from the L'Anse Amour Burial Mound National Historic Site.
Gateway to Labrador Visitor Centre	L'Anse au Clair	This building was the community's first church (built in 1909 by volunteers) and was totally restored in 1992.
Point Amour Lighthouse	L'anse-amour	The Point Amour light station is composed of a number of buildings, including the light tower and attached original keeper's dwelling.

Source: Museum Association of Newfoundland and Labrador. <http://www.manl.nf.ca/>

One of the best examples of a small museum that depicts the early life in a small fishing outpost is the *Tête de Vache* Museum in Cow Head, which was relocated in

1999 to the Dr. & Mrs. Henry N. Payne Community Museum and Craft Shop. Founded in 1975, it is the longest running museum on the West Coast of Newfoundland.

The Visitor Centre at L'Anse au Clair in southern Labrador provides an introduction to the culture of the southern Labrador area, past and present, and is an excellent example of the use of an existing historic building (in this case, a church) rather than creating a new structure.

The Labrador Straits Museum is between the communities of Forteau and L'Anse au Loup. Created and managed by the Labrador Straits Women's Institute, this museum was built in 1978 with the goal of highlighting the local way of life over the last one hundred and fifty years. With a focus on the domestic life and the role of women in communities, the museum also portrays local history through the eyes of those who have helped shape this heritage (<http://www.labradorstraitsmuseum.ca/>).

Some but not all of these museums are members of The Museum Association of Newfoundland and Labrador, which is a professional society that supports the work of small museums in the Province.

4.5 NATIONAL PARKS, HISTORIC SITES, AND SHIPWRECKS

4.5.1 National parks and historic sites

The western Newfoundland and southern Labrador area is known world-wide for Gros Morne National Park and for L'Anse aux Meadows National Historic Site. Less well known but of equal importance for their record of history are the Port au Choix National Historic Site and the Red Bay National Historic Site. Table 88 summarizes the features of these five sites.

Table 88. National parks and historic sites within western Newfoundland and southern Labrador coastal areas.

Park/Historic Site	Special Features
Great Northern Peninsula	
Gros Morne National Park	area of great natural beauty with a rich variety of scenery, wildlife, and recreational activities Discovery Centre; Interpretive Programs; Camping; Backcountry Camping; Group Camping; Hiking Trail; Boat Tour; Information; Accommodations; Interpretive Sea Kayaking.
Port au Choix National Historic Site	The remains of four ancient cultures have been found at Port au Choix to date: Maritime Archaic Indian, Dorset and Groswater Paleoeskimo, and Recent Indians Visitor Centre, where artifacts, exhibits and dioramas tell the fascinating story of these ancient cultures; Interesting geology and wildflowers; Point Riche lighthouse; Phillip's Garden; an archaeological site; Visit an ongoing archaeological excavation.
L'Anse aux Meadows Historic Site	earliest known European settlement in the New World Visitor Centre; view exhibits, dioramas, models and artifacts and the film telling of the search and discovery of the site by Helge and Anne Steine Ingstad; Guided tour of the archaeological site; learn about the "Meeting of Two Worlds" sculpture.
Southern Labrador	
Red Bay National Historic Site	Basque country (northern Spain and southern France) whaling station during the 16th century Visitor Orientation Centre where a Chalupa; a Basque whaling boat retrieved from Red Bay Harbour is on display; Visitor Interpretation Centre for more enhanced exhibits and services; Boat to Saddle Island and the archaeological sites; Walking trails.

4.5.2 Shipwrecks

There are several known shipwrecks and associated materials of archaeological significance in western Newfoundland and southern Labrador (Table 89). These comprise an important record of local history and serve as valuable artifacts for Canada and the world. Their precise locations are not included, in order to protect the sites from disturbance or unauthorized visitation (Martha Drake, Provincial Archaeologist, pers. comm., 2008). Red Bay, in southern Labrador, is a noteworthy site as it contains the largest known concentration of sunken Basque whaling ships in the world. The ships and associated whale bone and building materials such as roofing tiles are all within the jurisdiction of Parks Canada (Stephen Hull, Provincial Archaeology Office, Culture and Heritage Division, Department of Tourism, Culture and Recreation, pers. comm., 2009).

Table 89. Archaeologically known shipwrecks and associated materials in western Newfoundland and southern Labrador coastal areas.

Description	
Bay St. George/Port au Port	
1.	Black Bank in Bay St. George - Large portion of a wooden ship (40ft x 20ft), with some form of copper or copper alloy pegs.
Bay of Islands	
1.	Humber Arm - Bowater Tugboat
Great Northern Peninsula	
1.	Gros Morne National Park - Several wooden planks from a ship, some of which are curved; wooden, iron and copper or copper alloy pegs.
2.	Port aux Choix - Materials recovered from the dredging of Old Port au Choix Harbour.
3.	Near L'anse aux Meadows - Wreck of the S.S. Langleecrag.
4.	Gros Morne National Park - This site consists of the remains of a large rusted shipwreck, the S.S. <i>Ethie</i> .
5.	A 19th century shipwreck found directly north of L'Anse aux Meadows by scallop draggers.
Southern Labrador	
1.	Point Amour - Raleigh: a 10,000-ton light cruiser, British, ran aground off Point Amour in August 1922, scuttled with explosives in 1926, about 900 naval rounds are still on site, in 9 metres of water 15 metres from shore.
2.	Red Bay - Structural remains (ship's timbers) of a 16th Basque whaling vessel which was completely excavated from 1978 through 1985 by Parks Canada
3.	Red Bay - Concentration of ballast stone and wood located close to shore in about 4m of water - the remains of what is believed to be a 16th century Basque whaling ship.
4.	Red Bay - A batel (ship's longboat) lying upside down and an unidentified small craft in approximately 3m of water
5.	Red Bay - The Basque whaler, <i>San Juan</i> , lying on its starboard side in less than 3m of water.
6.	Red Bay - 16th century Basque Whaling ship lying on a moderately sloping seabed
7.	Red Bay - At least 2 whale skulls, rib and vertebral elements. Most were partially buried, no tool marks were noted.
8.	Concentration 1: Skull, ribs and other badly broken bone fragments. 2: Ribs, various other parts and parts of several skulls. Associated with Basque whaling.
9.	Underwater whale bone deposit, associated with Basque whaling.
10.	Consisted of a deposit of whale bone and Basque roofing tiles.
11.	Consisted of a deposit of whale bone and Basque roofing tiles.
12.	Chateau Bay - Sunken Basque whaling ship.

Source: Provincial Archaeology Office, Culture and Heritage Division, Department of Tourism, Culture and Recreation 2008c.

4.6 NATURAL HERITAGE, CONSERVATION, AND STEWARDSHIP

4.6.1 Species at risk

The *Species at Risk Act* (SARA) is a federal law designed to prevent wildlife species from becoming extinct. It was passed in 2003 and enforcement initiatives under the Act became effective in 2005. Such initiatives make it illegal to harm or kill species listed under SARA, or to harm or destroy their critical habitat.

As of 2009 there are 32 species of birds, fish, mammals, arthropods, vascular plants, and lichens identified as at risk under SARA that are relevant to the western Newfoundland and southern Labrador region (Table 90). The Mountain Holly Fern has not been confirmed within the region within the past 50 years (Peter Thomas, Recovery Biologist, Environment Canada, Mount Pearl, NL, pers. comm., 2008).

Table 90. Species at risk listed under SARA that occur within western Newfoundland and southern Labrador.

Common Name	Status	Common Name	Status
Birds		Fishes	
Eskimo Curlew	Endangered	Northern Wolffish	Threatened
Piping Plover	Endangered	Spotted Wolffish	Threatened
Red Crossbill	Endangered	American Eel	Special Concern
Ivory Gull	Special Concern	Atlantic Wolffish	Special Concern
Anatum Peregrine Falcon	Special Concern	Banded Killifish	Special Concern
Barrow's Goldeneye (Eastern pop)	Special Concern	Roughhead Grenadier	Special Concern
Harlequin Duck	Special Concern	Shortnose Sturgeon	Special Concern
Short-eared Owl	Special Concern	Mammals	
Tundra Peregrine Falcon	Special Concern	Blue Whale	Endangered
Vascular Plants		North Atlantic Right Whale	Endangered
Barrens Willow	Endangered	Wolverine	Endangered
Long's Braya	Endangered	American Marten (Newfoundland pop.)	Endangered
Mountain Holly Fern	Endangered	Beluga Whale (St. Lawrence Estuary pop)	Threatened
Fernald's Braya	Threatened	Woodland Caribou	Threatened
Fernald's Milk-vetch	Special Concern	Fin Whale (Atlantic pop)	Special Concern
Lichens		Harbour Porpoise (Northwest Atlantic pop)	Special Concern
Boreal Felt Lichen (Boreal pop.)	Special Concern	Sowerby's Beaked Whale	Special Concern
Arthropods			
Monarch Butterfly	Special Concern		

Source: Species at Risk Public Registry 2009.

Some of the species in the list already have recovery plans while others are being developed. In addition, some species have become a focus for local stewardship initiatives such as the Limestone Barrens Habitat Stewardship Program, which has been operating on the Great Northern Peninsula since 2001. It aims to conserve the distinctive Limestone Barrens landscape through local stewardship activities and public involvement. The project, funded in part by Environment Canada's Habitat Stewardship Program for Species at Risk, addresses the various threats to the endangered and threatened species and their habitats and focuses on awareness, interpretation, stewardship activities, and ecotourism development in ways that empower local communities and land users to manage the habitat. In conjunction with this program, Stewardship Agreements (see Section 4.6.4) were signed between the Province of Newfoundland and Labrador and a local school.

A workshop was held in 2007 that brought together researchers, local stakeholders, and government agency representatives at various levels to discuss the threats to the limestone barrens and how to encourage local stewardship (Limestone Barrens Habitat Stewardship Program 2007).

4.6.2 Provincially protected areas

The western Newfoundland and southern Labrador region between Cape Ray, Newfoundland and Cape St. Charles, Labrador contains a total of nine provincially protected areas.

Provincially protected areas were created and are maintained for the purposes of biodiversity conservation, scientific research, recreation, education, and ecotourism.

Of the six classifications of provincially protected areas in Newfoundland and Labrador, two of them—ecological reserves and provincial parks—occur in the western Newfoundland and southern Labrador region. Their locations are identified in Figure 25.

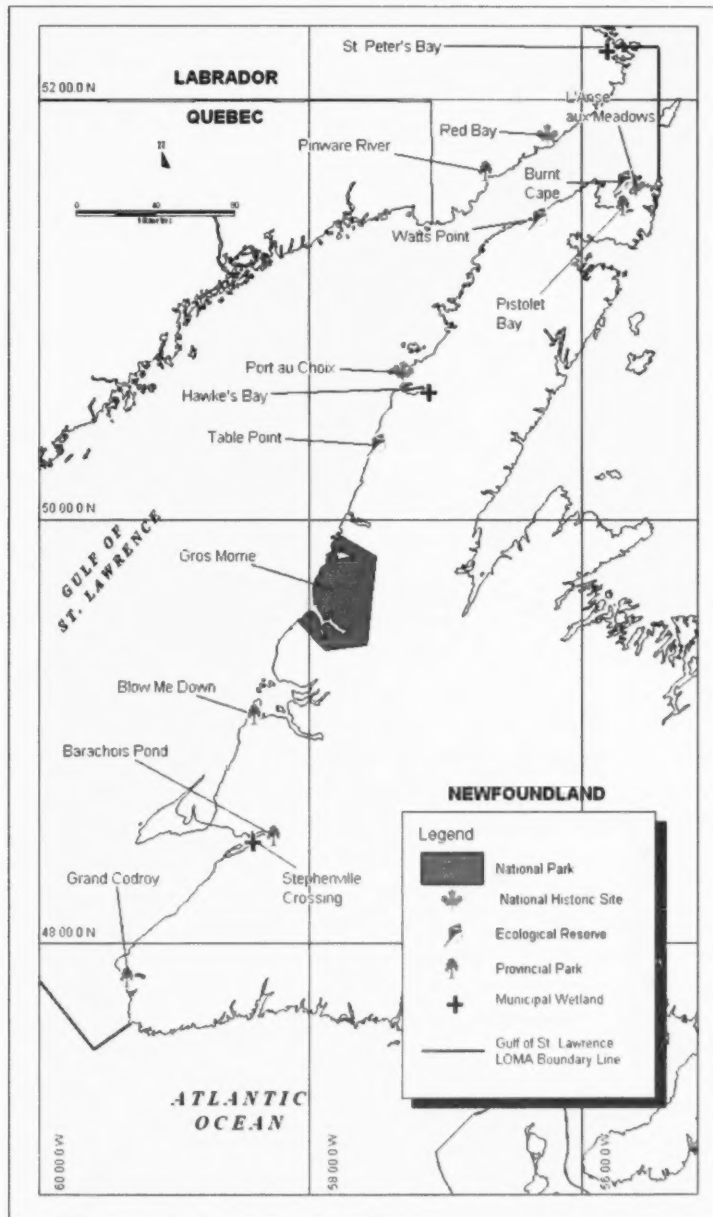


Figure 25. Federal and provincial protected areas and municipal wetland sites in the western Newfoundland and southern Labrador region.

Ecological reserves are areas that contain a representative or unique ecosystem, species, or natural phenomena. All four ecological reserves in the region occur within the Great Northern Peninsula coastal area (Table 91). The Sandy Cove Provisional Ecological Reserve was designated as provisional in 2007 and as of March 2009 was awaiting full ecological reserve status. Information about a new ecological reserve planned for the western Newfoundland and southern Labrador region was requested but information was not made available at the time of this report.

Table 91. Ecological reserves, Great Northern Peninsula.

Reserve	Size	Location	Significant Features
Burnt Cape Ecological Reserve	3.6km ²	Tip of Great Northern Peninsula	Botanical. On limestone barrens. > 300 plant species, 30 of which are considered rare. Arctic bladderpod, alpine arnica, and dwarf hawk's beard. A Friends of Burnt Cape provides additional local support.
Table Point Ecological Reserve	1.16km ²	2 km north of Bellburns on the Great Northern Peninsula	Fossil-type. Documents and protects fossils (brachiopods, trilobites, others) and rocks from 468-458 million years ago. large limestone formations.
Watts Point Ecological Reserve	30.9km ²	Northern part of Great Northern Peninsula, Strait of Belle Isle.	Botanical. Limestone barrens. Some plant species found nowhere else in the world, including endangered barrens willow and threatened Fernald's braya. Main terrace area contains patches of herbs such as purple mountain saxifrage.
Sandy Cove Provisional Ecological Reserve	15 hectares	Northern Peninsula	Botanical. Protects the endangered Long's Braya. Listed as "Sandy Cove" in the 2007 Provincial Legislation.

Source: Department of Environment and Conservation, Parks and Natural Areas Division 2009.

Provincial parks, the second type of provincially protected area designated in the region, are for the purposes of outdoor recreation, camping, appreciation of nature, and protection to natural features and species within their borders. At least one provincial park occurs in each of the coastal areas (Table 92). Provincial park reserves protect areas with significant natural features and landscapes. Many of the park reserves in the Province were former provincial parks, but in recent years the campground portion has been leased to private operators. The park reserve is the remaining land mass that was included in the former provincial park. This is the case with the Grand Codroy Park Reserve (Table 92).

Table 92. Provincial parks within western Newfoundland and southern Labrador coastal areas.

Park	Size	# of Campsites	Features/Activities
Bay St. George/Port au Port			
Grand Codroy Park Reserve			Offers a wonderful view of the Long Range Mountains. It protects a portion of a fluvial delta.
Barachois Pond	3500 hectares	150	Hiking, Camping, Day Use, Swimming and Boating, Fishing, Park Interpretation.
Bay of Islands			
Blow Me Down		28	Camp, Day Use.
Great Northern Peninsula			
Pistolet Bay	897 hectares	30	Camping, Day Use, Swimming, Canoeing, Fishing.
Southern Labrador			
Pinware River	68 hectare	15	Camping, Picnicking, Fishing, Hiking.

Source: Department of Environment and Conservation, Parks and Natural Areas Division 2008.

4.6.3 Ramsar sites

A Ramsar designated site refers to the international *Convention on Wetlands of Importance Especially as Waterfowl Habitat*, an intergovernmental treaty, signed in Ramsar, Iran, in 1971, that provides the framework for international cooperation in the conservation and wise use of wetlands and their resources. The Grand Codroy River and Estuary in the Codroy Valley received Ramsar designation in May of 1987 and is the only Ramsar designated wetland in the Province. The area covers approximately 925 ha. of estuarine waters and estuarine systems of deltas. The site is an exceptionally fine example of a large coastal estuary and is the Province's most important wetland. It supports important nesting and rearing habitat for many species of migratory birds and is a critical staging area for several waterfowl species, including American Black Duck and Canada Goose. Shoreline and upland habitats have been or are currently protected under stewardship and other agreements among collaborating partners, including the provincial Department of Environment and Conservation, The Nature Conservancy, Wildlife Habitat Canada, Ducks Unlimited, and numerous private landowners who designated their land for the purposes of enhancing wildlife and wildlife habitat.

Noteworthy bird records for the Grand Codroy estuary in 2008 include Piping Plover nesting along the Millville beach and Great Blue Heron nesting (first provincial record) in woodland habitat. The publication, *A Grand Codroy Estuary Wetlands Conservation Plan* (1998- check) exists, which identifies the boundaries of the Ramsar site, the bird and plant species of note, and the recommended uses of the habitats within the designated area.

4.6.4 Municipal wetlands stewardship

The Eastern Habitat Joint Venture (EHJV) is a collaborative program involving provinces, environmental organizations such as Ducks Unlimited, and corporations with interests in wetlands conservation that implements the goals of the North American Waterfowl Management Plan for increasing waterfowl populations and enhancing wetlands as waterfowl habitat. The EHJV program in Newfoundland and Labrador has pioneered stewardship agreements as a way of building local support

and responsibility for wetlands habitat. The program uses voluntary stewardship agreements between the Province's Minister for Environment and Conservation and corporations, municipalities, and schools to identify management zones and to encourage partners in the protection of significant wetland habitat. Agreements often specify the types of activities that may be allowed in designated areas and asserts a commitment on the part of the municipality or landowner to care for the designated area. In turn, the provincial office of the EHJV provides technical advice, resource inventories, and a management plan for the designated areas. An audit conducted by Intervale Associates (2003) concluded that the program has made substantial program accomplishment.

There are currently three stewardship agreements in place or pending for municipal wetlands in western Newfoundland and southern Labrador (Table 93). A Municipal Wetlands Stewardship Agreement has existed with the Town of Stephenville Crossing since 1995. It is a highly successful, locally-driven program that has secured 3,637 acres as management units and designated an additional 8,033 acres for stewardship. The management units include the St. George's River (including the St. George's River/Harry's River Estuary, which is one of the richest areas for waterfowl in the Province), a converted wetland in the heart of town called "The Prairie," and Seal Cove Brook (to be formalized). The agreement is voluntary and has no special regulatory control. So much local pride has been generated by the municipal stewardship program that the Town of Stephenville Crossing has branded itself the "Jewel of Newfoundland's Wetlands."

The consultative process leading towards a municipal stewardship program can occur over several years. This is the case in Hawke's Bay, where since 1999 a process has been underway for a proposed municipal stewardship agreement between the Town of Hawke's Bay and the Province of Newfoundland and Labrador, through the EHJV program. By April 2005 the Council supported a stewardship agreement, which is currently pending general approval by the residents (Department of Environment and Conservation 2007).

For several years, a coastal habitat stewardship program has been discussed for the St. Peter's Bay section of coastline, islands, and inshore waters north of Red Bay and south of Mary's Harbour, Labrador. The bay is productive as a nesting, feeding, and staging area for waterfowl, particularly Common Eider, and was once classified as a federal migratory bird sanctuary. Residents of neighbouring towns have traditionally hunted waterfowl in the bay; many residents now wish to conserve and enhance the waterfowl populations of the bay for future generations to enjoy. The Town of Mary's Harbour, just north of the Southern Labrador coastal area, has signed a Coastal Stewardship Agreement with a responsible staff level authority in the Province's Wildlife Division that pledges the town's commitment to responsible behaviour with respect to wildlife and wildlife habitat. The Towns of Red Bay and St. Lewis have also been involved in discussions (Jason Foster, Stewardship Biologist, Eastern Habitat Joint Venture, Department of Environment and Conservation, pers. comm., 2008).

Table 93. Municipal wetlands stewardship sites in western Newfoundland and southern Labrador coastal areas.

Municipal Wetlands Stewardship Site	Significant Features
Bay St. George/Port au Port	
Stephenville Crossing	St. George's River, "the Prairie," and Seal Cove Brook, freshwater, saltwater, and brackish wetlands that support Black Duck, Canada Goose, Red-breasted Merganser, Common Merganser, Common Goldeneye, Greater Scaup. >147 species observed.
Great Northern Peninsula	
Hawke's Bay	Proposed: areas of ponds, bogs, and marshes including Whale Factory Pond, Otter Pond, Muddy Cove Pond, The Dam, Ridge Pond, Torrent River-Stave's Pond that provide prime habitat for nesting, brood rearing, and/or staging of waterfowl. Possible additional buffer zones. Green-winged teal, Ring-necked duck, Common Goldeneye, Black Duck, mergansers and other species.
Southern Labrador	
St. Peter's Bay	25 km south of Mary's Harbour, 58 km northeast of Red Bay. Former federal migratory bird sanctuary (1949-1880). Rocky coast, islands, shoals. Prime moulting area for Common Eider. Other species: Canada goose, common merganser, various species of scoter, and harlequin duck. Best stewardship practices will be promoted and a Conservation Plan developed.

Source: Department of Environment and Conservation 2008a.

Other stewardship initiatives have been discussed. The provincial Department of Environment and Conservation, Wildlife Division, held meetings with the Council members of the Town of St. Paul's from 2003 to 2006 concerning a Municipal Wetlands Stewardship Program for the town. A newly elected Council in 2006 has decided to postpone further discussions for a later time (Jason Foster, Stewardship Biologist, Eastern Habitat Joint Venture, Department of Environment and Conservation, pers. comm., 2008).

A corporate stewardship agreement also exists with Corner Brook Pulp and Paper Company Limited for the Upper Humber Wetlands Complex, a site located on the upper Humber River.

4.6.5 Protection of marine areas, marine stewardship initiatives, and other research

Currently there are no federal marine protected areas established in western Newfoundland and southern Labrador. However, scientists from the Department of Fisheries and Oceans Canada have identified the waters off the west coast of Newfoundland and in the Strait of Belle Isle as an Ecologically and Biologically Significant Areas (EBSAs). They recognize these areas as important for supporting concentrations of groundfish—including juvenile Atlantic cod, redfish, and Atlantic wolffish—and, in winter, portions of the Esquiman Channel forming the only known refuge for the Gulf capelin and northern Gulf Atlantic herring populations. The area offshore from Bay St. George is known as the principal area for early spawning of Atlantic cod; the coastal area north of the Port au Port Peninsula is an area of abundance for capelin and Atlantic herring larvae (DFO 2007c).

Long before formal protection measures, harvesters have been engaged in community-based stewardship and protection initiatives aimed at sustainability of fishery resources. In 2002, lobster harvesters in western Newfoundland initiated the

closing of two small areas for lobster fishing at Trout River and Shoal Point on the Great Northern Peninsula. In the Port au Port Bay, lobster harvesters started a self-policing and V-notching project to prevent damage to the stock that could occur from retaining undersized and berried lobsters.

In the 1990s members of the Fish, Food, and Allied Workers coordinated a lobster conservation initiative called Ocean Watch for Lobster Fishing Areas 14 A, B, and C. The project itself was short-lived but served to encourage the development of several harvester-driven conservation initiatives for lobster in recent years, particularly in the 14B area. These include V-notching, closed areas, shorter seasons, no fishing on Sundays, size limitations, logbook data gathering, and at sea sampling.

Researchers at Memorial University of Newfoundland, in conjunction with numerous community-based organizations along the west coast, government agencies, Regional Economic Development Boards, and the Bonne Bay Research Station at Norris Point, have launched a multi-year Community University Research for Recovery Alliance, which will research several dimensions of fisheries recovery and the effects on local communities of the west coast. The project seeks to engage communities and stakeholder groups in a process beyond research to include the education, networking, and cultural needs of residents of western Newfoundland. The project's lead investigator and director of the project is Dr. Barb Neis, Memorial University of Newfoundland and Labrador.

4.6.6 Databases of ecological and cultural information

The Atlantic Canada Conservation Data Centre, Newfoundland and Labrador office, maintains a database of recorded observations for fauna and flora of the Province. Observational data are recorded for seabirds and other waterbirds, freshwater fish, and other species of interest that are listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and fall under the protection of the *Species at Risk Act* and the provincial *Endangered Species Act*.

The Community-based Coastal Resource Inventory of Newfoundland and Labrador began on the Northern Peninsula in the late 1990s and has since encompassed the entire island of Newfoundland. Work began in Labrador in 2008. Using interviews with local residents, the aim was to create a database of spatial information showing the location of coastal and ocean resources (both commercially harvested and non-harvested). The inventory is a tool whereby traditional knowledge can be used in planning and decisions about the use of coastal and ocean resources. The project involved DFO, FFAW, Memorial University, Regional Economic Development Boards, and community groups.

During the mid-1990s DFO and the FFAW initiated a Cod Sentinel program, which began on the west coast, to acquire information on the closed cod fishery and to incorporate fish harvesters' knowledge into fishery science and management. Through the Sentinel Program fish harvesters developed an abundance index that has been used in the stock assessment process. In 2003, DFO and FFAW initiated the Fisheries Science Collaborative Program, through which harvesters gather data

on all commercial species to be used in stock assessment and management decisions.

5.0 SYNOPSIS

Based on the information obtained for this report, an overview of the main social, economic, and cultural features of western Newfoundland and southern Labrador has emerged.

The existing social features and activities are strongly influenced by three dominant trends: a declining population, an aging population, and an elevated unemployment rate well above the provincial and national averages. An important feature of the region is the extremely small size of most of the communities. It is expected that the number of municipalities that engage in service sharing will increase in the near future. In the coming years, the larger municipalities will be expected to comply with new government regulations regarding the treatment and disposal of wastewater.

The various federal, provincial, municipal, and Aboriginal jurisdictions are complemented by a wide variety of institutional, industry, and nongovernmental organizations, each of which has a role to play in integrated coastal and oceans management.

Within the economic sphere, two historically important mainstays, commercial fisheries and mining, remain dominant, while a third, newsprint, is in decline. Commercial fisheries remain the most important economic base for many of the small communities of the western Newfoundland and southern Labrador region, yet they operate in a highly uncertain regulatory environment. A related industry, sealing, endures volatile market conditions. In contrast, mining as well as oil and gas exploration, are inherently speculative and capital-intensive. These economic activities are also highly influenced by globalization. As a result, small coastal communities that depend on one or more of these resource-based industries are inherently at risk. The economics of the region are bolstered by federal and provincial investment, a major provider of which is the Atlantic Canada Opportunities Agency.

Recreational opportunities are very important to residents of the region, particularly hunting and fishing. An increase in cruise ship visitation is likely to encourage communities to seek to improve existing infrastructure and services, while calling upon port and harbour authorities to coordinate the varied uses of the harbours.

Western Newfoundland and southern Labrador's cultural development has been marked by a surge of interest in Aboriginal heritage and culture. All elements of the region's population appear to embrace a new enthusiasm for preserving the tangible environment, conserving marine resources, and interpreting the rich diversity of human history.

These interests find expression in a number of stewardship initiatives, including projects for wildlife and endangered species, commercial fisheries, rare plants and habitats, municipal wetlands, and protected areas. The participation of many

stakeholder groups in the stewardship of resources and habitats will need to be recognized in integrated management planning.

The preparation of this report was subject to inevitable gaps in data. Analysis was hampered by insufficient statistical information available for recent years and inconsistent portrayal of data by various sources of information. It was difficult to determine the size of the Aboriginal population, because while local bands reported recent increases in membership, their numbers were not comparable to the most recent data by Statistics Canada. Within the economic sector, the absence of reliable housing data was a distinct drawback. It was not possible to determine what role if any that housing development might be playing with respect to shoreline access, pollution, and competing interests over coastal land use.

Wherever possible the information presented in this report was organized into the four geographically defined coastal areas, which allowed comparisons to be made among those areas with respect to social, economic, and cultural features and activities. There were certain limitations caused by the geographic boundaries of the coastal areas, most noticeable being that the boundaries of coastal areas were not consistent with those of either the Regional Economic Development Zones or the zones established by the Rural Secretariat. In addition, the boundaries of the coastal areas did not take into consideration the influence of larger service areas or regional growth centres that are situated just outside the boundaries of two coastal areas. Examples of these would be Port aux Basques, which is located south of the Bay St. George/Port au Port coastal area and serves as an important service centre for the Codroy Valley, and St. Anthony, which is located east of the Great Northern Peninsula coastal area and serves communities of the Great Northern Peninsula and southern Labrador. The reliance on these communities as employment and service centres is evident from provincial labour market studies showing an emerging work force that commutes daily from rural areas to centres of population (Department of Human Resources, Labour and Employment 2007). Due to these and other factors, a more complete assessment of the relevant social, economic, and cultural boundaries that define coastal areas may need to be undertaken at a later time.

Trends in the social, economic, and cultural activities in western Newfoundland and southern Labrador should be expected to change in the near future, suggesting that any report of this nature may need to be modified or added to over time. Furthermore, there needs to be analysis and discussion with the many and varied stakeholder interest groups in the region. This overview demonstrates that a wide variety of social, economic, and cultural features and activities in western Newfoundland and southern Labrador are clearly coastal and marine resource-based. Integrated coastal and oceans management is an appropriate and necessary approach towards planning and managing human activities.

References

- Academy Canada. 2008. <http://www.academycanada.com/programs.html> (accessed March 2008).
- ACOA's Project Information Site. 2008. <http://pub.acoa-apeca.gc.ca/atip/e/content/> (accessed May 2008).
- AMEC Earth & Environmental Limited. 2003. Management of wastes from Atlantic seafood processing operations: final report. Environment Canada, Atlantic Region, National Programme of Action, Atlantic Regional Team, Dartmouth, Nova Scotia. 93 p. + appendices.
- AMEC Earth & Environmental. 2008. Bonne Bay Marine Station - Strategic Plan.
- Atlantic Minerals. 2008. <http://www.atlanticminerals.com> (accessed June 2008).
- BAE Newplan Group Limited. 2006. Final Report: Corner Brook sewage treatment study, vol. 1. Project 722231. BAE Newplan Group Ltd, Mount Pearl, NL, 96 p + monitoring results.
- BAE-Newplan Group Limited. 2007a. Final report – Corner Brook sewage treatment study.
- BAE-Newplan Group Limited. 2007b. Final report - issues scan of selected coastal and ocean areas of Newfoundland and Labrador. Department of Fisheries and Aquaculture and Department of Environment and Conservation. St. Johns, NL. 144 p.
- Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee. 2006a. Draft terms of reference. Stephenville, NL.
- Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee. 2006b. Priority setting and action planning exercise. 25 Nov 2006. Stephenville, NL.
- Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee. 2007. Results of coastal information sessions held in Codroy, St. George's and Piccadilly, 10-12 April 2007. Stephenville, NL. 11p. + appendices.
- Bay St. George/Port au Port Peninsula Marine and Coastal Resources Steering Committee. 2008. Report on the status of coastal issues, March 2008. Stephenville, NL.
- Borlase, Tim. 1994. The Labrador settlers, Métis and Kablunângajuit. Labrador East Integrated School Board, Happy Valley-Goose Bay, NL. 335 p.

- Canada-Newfoundland and Labrador Offshore Petroleum Board. 2008. http://www.cnlopb.nl.ca/maps/wc_2008.pdf (accessed June 2008).
- Canada Post. 2009. Forward sortation areas map.
- Canadian Broadcasting Corporation News, "No options left, Humber Valley Resort operator says," <http://www.cbc.ca/canada/newfoundland-labrador/story/2008/12/03/humber-valley.html> (accessed April 2009).
- Canadian Mortgage and Housing Corporation. 2008a. Housing Now: Atlantic Region. Fourth Quarter, 2008. Canadian Mortgage and Housing Corporation, Ottawa, Ontario.
- Canadian Mortgage and Housing Corporation. 2008b. Housing Now: Atlantic Region. Fourth Quarter, 2008. Canadian Mortgage and Housing Corporation, Ottawa, Ontario.
- Canadian Mortgage and Housing Corporation. 2009. Housing Market Outlook, Canada Edition, First Quarter, 2009. Canadian Mortgage and Housing Corporation, Ottawa, Ontario.
- CBC News. 2006. Seal pelts fetch record prices. <http://www.cbc.ca/canada/newfoundland-labrador/story/2006/04/19/nf-seal-pelt-20060419.html> (accessed May 2008).
- CBC News. 2008. Low pelt prices, high fuel costs frustrate sealers. <http://www.cbc.ca/canada/newfoundland-labrador/story/2008/04/07/seal-prices.html> (accessed May 2008).
- College of the North Atlantic. 2008. <http://www.cna.nl.ca/ProgramsCourses/default.asp>. (accessed March 2008).
- College of the North Atlantic. 2009. Data update on enrolment, Stephenville, NL.
- Community Information Database. 2009. <http://www.cid-bdc.ca/homepage.htm> (accessed March, 2009).
- Corner Brook Port Corporation. 2008. Unpublished data update on commodity information. Port Corporation, Corner Brook, NL.
- Corner Brook Port Corporation. 2009. Data update. Corner Brook, NL.
- Corner Brook Pulp and Paper Limited. 2009. <http://www.cbppi.com/> (accessed March, (2009).

Cruise Newfoundland and Labrador. 2008. Cruise ship visits and schedule for 2008, data update, Cruise Newfoundland and Labrador, St. John's, NL.

Cull, D.J. 2000. Quantitative comparison of levels of organic wastes from four major sources at four scales along the Newfoundland coastline. Thesis (M.Sc.). environmental science program, Memorial University of Newfoundland, St. John's, NL. 171 p.

Deer Lake Regional Airport. 2008. Passenger statistics.
<http://www.deerlakeairport.com/passengerStats.htm> (accessed May 2008).

Department of Environment and Conservation. 2005. Guidelines for the design, construction, and operation of water and sewerage systems.
http://www.env.gov.nl.ca/env/Env/waterres/CWWS/Guidelines_Water_Sewerage/Guidelines_for_Design_Constr_Oper_WSS.pdf. (accessed March 2008)

Department of Environment and Conservation. 2007. Newfoundland and Labrador hunting & trapping guide 2007-08, Corner Brook and St. John's, NL. 59 p.

Department of Environment and Conservation. 2008a. <http://www.env.gov.nl.ca/env/> (accessed March 2008).

Department of Environment and Conservation. 2008b. Municipal wastewater treatment in NL.
http://www.env.gov.nl.ca/env/Env/waterres/CWWS/NL_Wastewater_Treatment_Systems.pdf. (accessed May 2008).

Department of Environment and Conservation. 2008c. Hunting and trapping guide 2008-09. Government of Newfoundland and Labrador, Department of Environment and Conservation, Wildlife Division, 2008. 56 p.

Department of Environment and Conservation. 2009a. CBPPL Districts 14 and 15 Five-Year Operating Plan 2009-2013. <http://www.env.gov.nl.ca/env/Env/EA%202001/Project%20Info/1397.htm> (accessed March 2009)

Department of Environment & Conservation, Wildlife Division. 2009b. Bear, caribou and moose data.

Department of Finance. 2005. Estimating the value of the marine, coastal and ocean resources of Newfoundland and Labrador updated for the 2001-2004 period. St. John's, NL. 30 p.

Department of Finance. 2007a. Regional demographic profiles Newfoundland and Labrador. St. John's, NL. 48 p.

Department of Finance. 2007b. The economic review 2007. St. John's, NL. 20 p.

Department of Finance. 2008a. <http://www.fin.gov.nl.ca/fin/>. (accessed April 2008).

Department of Finance, Economic Research and Analysis Division. 2008b. Economy '08: securing a sustainable future. <http://www.economics.gov.nl.ca/E2008/forestry/andagri.pdf>. (accessed June 2008).

Department of Finance. 2009. The Economy 2009. <http://www.economics.gov.nl.ca> (accessed April 2009).

Department of Fisheries and Aquaculture. 2003. Fish processing policy review. 163p + appendices.

Department of Fisheries and Aquaculture. 2007a. The department of fisheries and aquaculture annual report 2006-07. St. John's, NL. 28 p.

Department of Fisheries and Aquaculture. 2007b. Seafood industry year in review 2006. <http://www.fishaq.gov.nl.ca/publications/yir/yir2006.pdf> (accessed March 2008).

Department of Fisheries and Aquaculture. 2008a. Data update on licensed processing plants. Department of Fisheries and Aquaculture, St. John's, NL.

Department of Fisheries and Aquaculture. 2008b. Data update on number of workers at processing plants during peak employment, Cape Ray to Cape St. Charles. Department of Fisheries and Aquaculture, Licensing and Quality Assurance Division, St. John's, NL.

Department of Fisheries and Aquaculture. 2008c. Newfoundland and Labrador aquaculture geographic information system. <http://www.aquagis.com/>. (accessed March 2008).

Department of Fisheries and Aquaculture. 2008d. Data update on number of workers at processing plants during peak employment, Cape Ray to Cape St. Charles. Department of Fisheries and Aquaculture, Licensing and Quality Assurance Division, St. John's, NL.

Department of Fisheries and Aquaculture. 2009. Data update on number of workers at processing plants during peak employment, Cape Ray to Cape St. Charles. Department of Fisheries and Aquaculture, Licensing and Quality Assurance Division, St. John's, NL.

- Department of Natural Resources. 2003. Provincial Sustainable Forest Management Strategy. <http://www.nr.gov.nl.ca/forestry/publications/SFM.pdf> (accessed April 2009).
- DFO. 2002. Canada's oceans strategy: our ocean, our future - policy and operational framework for integrated management of estuarine, coastal and marine environments in Canada. Fisheries and Oceans Canada, Oceans Directorate, Ottawa, Ontario. 36 p.
- DFO. 2005a. Canada's oceans action plan: for present and future generations. Fisheries and Oceans Canada, Communications Branch, Ottawa, Ontario. 20 p.
- DFO. 2005b. The Gulf of St. Lawrence: a unique ecosystem. Fisheries and Oceans Canada: Oceans and Science Branch, St. John's, NL. 30 p.
- DFO. 2005c. Database of municipal sewage discharge by community. Part of a Marine Environmental Quality Atlas. Oceans Program Division, Fisheries and Oceans Canada, St. John's, NL.
- DFO and DFA. 2006. Canada - Newfoundland and Labrador fishing industry renewal initiative: discussion paper. St. John's, NL. 54 p.
- DFO. 2006a. Statistical profile: number of fishing licences 2006, Newfoundland & Labrador region. Fisheries and Oceans Canada, Regional Licensing Office, Fisheries & Aquaculture Management Branch, NL. 57 p.
- DFO. 2007a. New recreational management plan for salmon anglers. <http://www.dfo-mpo.gc.ca/media/npress-communique/2007/nl-tnl21-eng.htm> (accessed June 2007).
- DFO. 2007b. Survey of recreational fishing in Canada 2005. Fisheries and Oceans Canada, Policy Sector, Economic Analysis and Statistics. Ottawa, ON. 50 p.
- DFO. 2007c. Ecologically and biologically significant areas (EBSA) in the estuary and Gulf of St. Lawrence: identification and characterization. DFO Can. Sci. Advis. Sec., Sci. Adv. Rep. 2007/016.
- DFO. 2008a. List of harbour authorities for western Newfoundland, Fisheries and Oceans Canada. Corner Brook, NL. Also available: http://www.dfo-mpo.gc.ca/sch/HA-AP-NF_e.asp (accessed April 2008).
- DFO. 2008b. Landings data for groundfish, shellfish, and pelagics, Cape Ray to Cape St. Charles. Fisheries and Oceans Canada, St. John's, NL.
- DFO. 2008c. Newfoundland and Labrador anglers guide 2008. <http://www.nfl.dfo-mpo.gc.ca/publications/guide2008/p10.asp> (accessed May 2008).

- DFO. 2009a. Data on number of active fishers by coastal area, 2001-2007. Fisheries and Oceans Canada. Corner Brook, NL.
- DFO. 2009b. Salmon catch data. Fisheries and Oceans Canada. Corner Brook, NL.
- DFO. 2009c. Aboriginal Fisheries Strategy. (<http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/afs-srapa-eng.htm>) (accessed April 2009)
- Department of Innovation, Trade and rural development. 2007. Annual report 2006-2007. <http://www.intrd.gov.nl.ca/intrd/pdf/INTRDAnnualReport07Web.pdf>. (accessed April 2008).
- Department of Justice, Canada. 1996. *Ocean's Act*. <http://laws.justice.gc.ca/en/ShowFullDoc/cs/O-2.4///en>. (accessed May 2008).
- Department of Justice, Canada. 2001. *Canada Shipping Act*. <http://laws.justice.gc.ca/en/ShowFullDoc/cs/C-10.15///en>. (accessed May 2008).
- Department of Municipal Affairs. 2008. Chair appointed to western regional waste management committee. <http://www.releases.gov.nl.ca/releases/2007/mpa>. (accessed March, 2008).
- Department of Natural Resources. 2003. Provincial sustainable forest management strategy. <http://www.nr.gov.nl.ca/forestry/publications/SFM.pdf>. (accessed April 2009).
- Department of Natural Resources. 2008a. Oil and gas report, August 2007. St. John's, NL. 28 p.
- Department of Natural Resources. 2008b. http://www.nr.gov.nl.ca/mines&en/Oil/companie_West.pdf. (accessed May 2008).
- Department of Natural Resources, Forest Resources and Agrifoods. 2009. Farming data for 2006.
- Department of Tourism, Culture and Recreation. 2003-2004 Exit survey program – highlights. Department of Tourism, Culture and Recreation, Government of Newfoundland and Labrador, St. John's, NL. 12 p.
- Department of Tourism, Culture and Recreation. 2006a. Outfitters survey. St. John's, NL.
- Department of Tourism Culture and Recreation. 2006b. Tourist hunting and fishing lodges. Corner Brook, NL, courtesy Dan Chaisson.

- Department of Tourism, Culture and Recreation. 2007. Backgrounder year-end provincial tourism performance 2007 and early tourism outlook 2008. <http://www.tcr.gov.nl.ca/tcr/publications/2007/2007%20Provincial%20Tourism%20Performance.pdf>. (accessed May 2008).
- Department of Tourism, Culture and Recreation. 2008a. Department of tourism, culture and recreation backgrounder year-end provincial tourism performance 2007 and early tourism outlook 2008. St. John's, NL. 25 p.
- Department of Tourism Culture, and Recreation. 2008b. Traveller's Guide. St. John's, NL. 424 p. Department of Tourism, Culture and Recreation. 2008c. Provincial archaeology office. <http://www.tcr.gov.nl.ca/tcr/pao/>. (accessed June 2008).
- Department of Tourism, Culture and Recreation. 2009. Year-end provincial tourism performance 2008 and early tourism outlook 2009, St. John's, NL. www.releases.gov.nl.ca/releases/2009/tcr/0206n07.htm (accessed March 2008).
- Department of Transportation and Works. 2008. Unpublished data update on the Apollo ferry. Marine Services Manager's Office, Department of Transportation and Works, St. John's, NL.
- Elections Canada. 2008. <http://www.elections.ca/>. (accessed May 2008).
- Elections Newfoundland and Labrador. 2008. <http://www.elections.gov.nl.ca/elections/> (accessed May 2008)
- Environment Canada. 2008. Species at Risk in Atlantic Canada, April 2008. http://www.sararegistry.gc.ca/default_e.cfm. (accessed April 2008).
- Federation of Newfoundland Indians. 2006. Final Report: Tourism strategy, phase I, scoping project. Prepared by WCYi, Conception Bay South, NL.
- Federation of Newfoundland Indians. 2008a. Federation of Newfoundland Indians 2008. Background report. Federation of Newfoundland Indians, Corner Brook, NL. 3 p.
- Federation of Newfoundland Indians. 2008b. <http://www.fni.nf.ca/main%20page/newpage1.htm> (accessed May 2008)
- Fish, Food, and Allied Workers. 2007. Contribution of the fishing industry to sustainable fisheries in Newfoundland and Labrador - the value of stewardship. FFAW, St. John's, NL. 25 p.
- Forestry and Agrifoods Agency, Dept of Natural Resources. 2009. Forest district permit data.

- Gardner Pinfold Consulting Economists Limited. 1997. The current and potential economic value of the Atlantic salmon fishery on the Humber river. Report prepared for the Salmon Council of Newfoundland and Labrador. February, 1997.
- Government of Canada. 2006. Canada's national programme of action for the protection of the marine environment from land-based activities. Communications branch: Fisheries and Oceans Canada. Ottawa, ON.
- Government of Canada. 2006. Species at risk public registry. http://www.sararegistry.gc.ca/default_e.cfm (accessed April 2009).
- Government of Newfoundland and Labrador Rural Secretariat. 2008. <http://www.exec.gov.nl.ca/rural/>. (accessed March 2008).
- Government of Newfoundland and Labrador. 2009. Mining in Newfoundland and Labrador, 2009.
- Gros Morne Institute for Sustainable Tourism. 2008. <http://www.gmist.ca/>. (accessed May 2008).
- Humber Valley Resort. 2008. <http://www.humbervalley.com/letter.asp> (accessed April 2009).
- Hussey, L. 2007. Fact book 2007. Centre for Institutional Analysis and Planning (CIAP).
- ICZM Steering Committee. 2008. ICZM Three-Year Work Plan: 2008-2011. Great Northern Peninsula Integrated Coastal Zone Management, RED Ochre Regional Board Inc. and NORDIC Economic Development Corporation, Parson's Pond, NL. 44 p.
- Intervale Associates. 2003. Municipal wetlands stewardship: audit 2003. Intervale Conservation and Heritage Associates Inc., Doyles, NL. 150 p.
- Intervale Associates Inc. 2006. Final report: integrated coastal zone management (ICZM): coastal planning in St. John Bay and Cow Head, Great Northern Peninsula. Report to the Great Northern Peninsula Integrated Coastal Zone Management (ICZM) Steering Committee. Parson's Pond, NL. 35 p. plus appendices.
- Limestone Barrens. 2008. Ours to protect. <http://www.limestonebarrens.ca>. (accessed March 2008).
- LGL Limited. 1994. Strategy for the development of Recreational Fisheries in Newfoundland and Labrador. St. John's: The Canada-Newfoundland

Cooperation Agreement for Salmonid Enhancement/Conservation. LGL Environmental Research Consultants Limited, P.O. Box 13248, Station A, St. John's, NL, Pp. 206.

Marine Atlantic. 2005. Annual report 2005. http://www.marine-atlantic.ca/en/company/publications/2005_Annual_Report_English.pdf. (accessed March 2008).

Marine Atlantic. 2006. Annual report 2006. http://www.marineatlantic.ca/en/company/publications/2005_Annual_Report_English.pdf. (accessed March 2008).

Mobilewords (publisher). 1998. Where once they stood: a gazetteer of abandonment. <http://www.willow-house.com/gazfree/default.htm> (accessed May 2008).

Model Forest of Newfoundland and Labrador. 2009. <http://www.wnrmf.com/fcp.html>. (accessed April 2009).

Montevecchi, W.A. 1998. Bird-Watching in the Codroy Valley and checklist of the birds of the Codroy Valley. Codroy Valley Development Association, Upper Ferry, Newfoundland.

Mullins, Conrad & Brennan, Jason. 2006. Gulf of St. Lawrence Integrated Management (GOSLIM) proceedings of five workshops held in western Newfoundland and Southern Labrador. Fisheries and Oceans Canada.

Municipalities Newfoundland and Labrador. 2007. Census of Municipalities in Newfoundland and Labrador. <http://municipalitiesnl.ca/modules/Documents/documents/2007%20Municipal%20Census.pdf>. (accessed March 2009).

Museum Association of Newfoundland and Labrador. 2008. <http://www.manl.nf.ca/>. (accessed June 2008).

Murphy, E.F. 2003. The distribution of pollock (*Pollachius virens*) in NAFO subdivision 3Ps. DFO CSAS research document 2003/004. Fisheries and Oceans Canada.

National Search and Rescue Secretariat. 2008. Directory of Canadian search and rescue organizations. https://www.nss.gc.ca/sar_directory/index_e.asp (accessed May 2008).

Division, Human Resources, Labour and Employment, St. John's, NL. 101p.

Newfoundland and Labrador Abandoned Communities Index. 2008. <http://www.willow->

house.com/gazfree/default.htm. (accessed May 2008).

Newfoundland and Labrador Department of Environment and Conservation 2008.
Data on park visitation, Parks and Natural Areas Division, Deer Lake, NL.

NL Human Resources, Labour and Employment. 2007. We are now going with just one pub: Department of Human Resources, Labour and Employment 2007. Labour market indicators and trends: St. Anthony – Port au Choix Region. Report #5, partnerships in the labour market initiative. Labour Market Development Division, Human Resources, Labour and Employment, St. John's, NL. 101p.

Newfoundland and Labrador Statistics Agency. 2008. <http://www.nfstats.gov.nf.ca>. (accessed March 2008).

Newfoundland and Labrador Waste Management Strategy. 2002. For this use: Government of Newfoundland and Labrador, Department of Environment. 2002. Newfoundland and Labrador waste management Strategy. St. John's, NL.

Nicol, Keith. 2001. Review of marine and coastal recreational activities: western Newfoundland and Southern Labrador. Report to Department of Fisheries and Oceans, Corner Brook, NL. 52 p.

NWest Energy 2008. http://www.nwestenergy.com/News_Details.asp?NewsID=1208218225. (accessed June 2008).

Parks and Natural Areas Division, Department of Environment and Conservation, Government of Newfoundland and Labrador. 1990. Management plan for table point ecological reserve. <http://www.env.gov.nl.ca/parks>. (accessed March 2008).

Peat Resources. 2008. <http://www.peatresources.com>. (accessed June 2008).

Port of Corner Brook. 2008. Data update on cruise ship schedule. Port of Corner Brook, Corner Brook, NL.

Quebec-Labrador Foundation. 1998. Waste management report for the Labrador Straits. Internal report documenting the results of a waste audit. Montreal, QC.

Redmond, K. and Murphy, D. 2003. A guide to sea kayaking in Newfoundland and Labrador. Nimbus Publishing Limited, Halifax, NS. 277 p.

Rural Secretariat. 2008. <http://www.exec.gov.nl.ca/rural/> (accessed March 2008).

Sir Wilfred Grenfell College. 2008. <http://www.swgc.mun.ca/Pages/default.aspx>.

(accessed March 2008).

Smallwood, J.R. (Editor in Chief). 1984. Encyclopedia of Newfoundland and Labrador. 5 vols. Newfoundland Book Publishers (1967) Ltd., St. John's, Newfoundland.

Statistics Canada. 2009. Definitions of census division and census subdivision. <http://www.statcan.gc.ca/start-debut-eng.html>. (accessed April 2009).

Statistics Canada. 2008a. Census of Canada 2006. <http://www12.statcan.ca/english/census/index.cfm>. (accessed March 2008).

Statistics Canada. 2008b. Census of Canada 2001. <http://www12.statcan.ca/english/census/index.cfm>. (accessed March 2008).

Tekoil and Gas Corporation. 2008. <http://tekoil.ir.stockpr.com/press-room/detail/61>. (accessed July 2008).

The Daily. 2008. Canada's population estimates. http://www.statcan.ca/Daily/English_080327/d080327d.htm. (accessed May 2008).

Three-D Geoconsultants Ltd. 2006. Stephenville Peat Moss Ltd. Registration of an Undertaking to Develop Peatland #69. Stephenville Peat Moss Company, Stephenville, NL.

Tompkins, Edward. 2004. Ktaqmkukewaq Mi'kmaq: Wiqamuti/The Mi'kmaq people of Newfoundland: a celebration. Federation of Newfoundland Indians. Corner Brook, NL. 128 p.

Transport Canada. 2006. Submarine cables (hydro and communication). Transport Canada, The Navigable Waters Protection Act, information brochure.

Vulcan Minerals. 2008. <http://www.vulcanminerals.ca/projects> (accessed June 2008).

Western Newfoundland Labrador Destination Marketing Organization. 2007. 2007-08 Visitor's guide. Rocky Harbour, NL.

Western Newfoundland Labrador destination marketing organization. 2008. Trails to the Vikings: western DMO information sessions and background information, internal document. Rocky Harbour, NL. 7 p.

Whoriskey, F.G. and J. Glebe. 1998. The Atlantic salmon biodiversity industry: economic initiatives and social conflict. Paper presented to the American Fisheries Society Annual Meeting, Hartford, CT. Atlantic Salmon Federation, St. Andrews, NB.

Appendix A-1. Total population and population density for coastal area, Bay St. George/Port au Port, 1996 to 2006.

Census Subdivision	Land Area (km ²)	2006		2001		1996		Percent Change 1996- 2006
		Total Population	Population Density (per km ²)	Total Population	Population Density (per km ²)	Total Population	Population Density (per km ²)	
Division No. 4, Subd. A	1,217.94	1,883	1.5	1,708	1.4	1,995	1.6	-5.61%
Division No. 4, Subd. B	1,847.26	1,399	0.8	1,472	0.8	1,745	0.9	-19.83%
Division No. 4, Subd. C	2,378.70	845	0.4	918	0.4	1,015	0.4	-16.75%
St. George's	25.83	1,246	48.2	1,354	52.4	1,560	60.4	-20.13%
Division No. 4, Subd. D	1,149.69	922	0.8	796	0.7	760	0.7	21.32%
Stephenville Crossing	31.20	1,960	62.8	1,993	63.9	2,215	71.0	-11.51%
Stephenville	35.69	6,588	184.6	7,109	199.2	7,755	217.3	-15.05%
Kippens	14.32	1,739	121.5	1,802	125.9	1,840	128.5	-5.49%
Port au Port East	24.76	608	24.6	642	25.9	750	30.3	-18.93%
Division No. 4, Subd. E	298.09	2,095	7.0	2,201	7.4	2,520	8.5	-16.87%
Cape St. George	33.46	893	26.7	926	27.7	1,095	32.7	-18.45%
Lourdes	8.10	550	67.9	650	80.2	755	93.2	-27.15%
Port au Port West- Aguathuna-Felix Cove	16.72	386	23.1	525	31.4	590	35.3	-34.58%
Total Coastal Area	7,081.76	21,114	3.0	22,096	3.1	24,595	3.5	-14.15%
Total WNSL Region	19,591.15	63,771	3.26	65,737	3.36	72,444	3.70	-11.97%
Newfoundland and Labrador	370,494.89	505,469	1.36	512,930	1.38	551,792	1.49	-8.40%
Canada	9,017,698.92	31,612,897	3.51	30,007,094	3.33	28,846,761	3.20	9.59%

Note: WNSL=western Newfoundland and southern Labrador.

Source: Statistics Canada, Census 2001 - 2006.

Appendix A-2. Total population and population density for coastal area, Bay of Islands, 1996 – 2006.

Census Subdivision	Land Area (km ²)	2006		2001		1996		Percent Change 1996- 2006
		Total Population	Population Density (per km ²)	Total Population	Population Density (per km ²)	Total Population	Population Density (per km ²)	
Gillams	6.70	402	60.0	406	60.6	460	68.7	-12.61%
Massey Drive	2.48	1,170	472.2	770	310.8	735	296.6	59.18%
Corner Brook	148.27	20,083	135.5	20,103	135.6	21,660	146.1	-7.28%
Division No. 5, Subd. D	1,322.62	5	0.0	10	0.0	10	0.0	-50.00%
Humber Arm South	65.05	1,854	28.5	1,800	27.7	1,985	30.5	-6.60%
McIvers	12.06	571	47.4	571	47.4	670	55.6	-14.78%
Cox's Cove	7.21	646	89.6	719	99.7	900	124.8	-28.22%
Lark Harbour	12.92	565	43.7	613	47.4	680	52.6	-16.91%
Meadows	3.79	637	168.1	676	178.3	735	193.9	-13.33%
Hughes Brook	1.60	197	123.2	188	117.6	181	113.2	8.84%
Irishtown-Summerside	11.89	1,290	108.5	1,304	109.6	1,425	119.8	-9.47%
Mount Moriah	15.71	752	47.9	700	44.6	750	47.8	0.27%
York Harbour	13.90	346	24.9	388	27.9	420	30.2	-17.62%
Total Coastal Area	1,624.19	28,518	17.6	28,248	17.4	30,611	18.8	-6.84%
Total WNSL Region	19,591.15	63,771	3.26	65,737	3.36	72,444	3.70	-11.97%
Newfoundland and Labrador	370,494.89	505,469	1.36	512,930	1.38	551,792	1.49	-8.40%
Canada	9,017,698.92	31,612,897	3.51	30,007,094	3.33	28,846,761	3.20	9.59%

Note: WNSL=western Newfoundland and southern Labrador.

Source: Statistics Canada, Census 2001 - 2006.

Appendix A-3. Total population and population density for coastal area, Great Northern Peninsula, 1996 – 2006.

Census Subdivision	Land Area (km ²)	2006		2001		1996		Percent Change 1996- 2006
		Total Population	Population Density (per km ²)	Total Population	Population Density (per km ²)	Total Population	Population Density (per km ²)	
Division No. 9, Subd. A	1,744.60	215	0.1	65	0.0	51	0.0	321.57%
Trout River	5.91	604	102.1	616	104.1	685	115.8	-11.82%
Woody Point, Bonne Bay	2.91	355	121.8	366	125.6	420	144.1	-15.48%
Norris Point	4.91	699	142.4	786	160.1	815	166.0	-14.23%
Rocky Harbour	12.08	978	81.0	1,002	83.0	1,070	88.6	-8.60%
Daniel's Harbour	8.19	288	35.2	350	42.7	435	53.1	-33.79%
Cow Head	17.84	493	27.6	511	28.6	660	37.0	-25.30%
Parson's Pond	12.63	387	30.6	427	33.8	530	42.0	-26.98%
Hawke's Bay	46.55	391	8.4	445	9.6	515	11.1	-24.08%
Port Saunders	38.81	747	19.2	812	20.9	855	22.0	-12.63%
St. Pauls	5.35	309	57.8	330	61.7	365	68.3	-15.34%
Division No. 9, Subd. C	1,965.37	3,001	1.5	3,282	1.7	3,655	1.9	-17.89%
Port au Choix	35.61	893	25.1	1,010	28.4	1,185	33.3	-24.64%
Anchor Point	2.41	309	128.1	320	132.7	350	145.1	-11.71%
Flower's Cove	7.64	270	35.4	325	42.6	355	46.5	-23.94%
Bird Cove	9.39	137	14.6	274	29.2	350	37.3	-60.86%
Glenburnie-Birchy Head-Shoal Brook	6.57	275	41.9	276	42.0	325	49.5	-15.38%
Division No. 9, Subd. D	946.11	893	0.9	1,012	1.1	1,130	1.2	-20.97%
Cook's Harbour	1.95	190	97.2	226	115.6	260	133.0	-26.92%
Raleigh	11.12	248	22.3	304	27.3	365	32.8	-32.05%
Sally's Cove	4.54	63	13.9	37	8.2	53	11.7	18.87%
Division No. 9, Subd. H	2,134.58	189	0.1	201	0.1	218	0.1	-13.30%
Bellburns	7.39	83	11.2	80	10.8	114	15.4	-27.19%
River of Ponds	4.69	251	53.5	274	58.4	335	71.4	-25.07%
Total Coastal Area	7,037.14	12,268	1.7	13,331	1.9	15,096	2.1	-18.73%
Total WNSL Region	19,591.15	63,771	3.26	65,737	3.36	72,444	3.70	-11.97%
Newfoundland and Labrador	370,494.89	505,469	1.36	512,930	1.38	551,792	1.49	-8.40%
Canada	9,017,698.92	31,612,897	3.51	30,007,094	3.33	28,846,761	3.20	9.59%

Note: WNSL=western Newfoundland and southern Labrador.

Source: Statistics Canada, Census 2001 - 2006.

Appendix A-4. Total population and population density for coastal area, Southern Labrador, 1996 – 2006.

Census Subdivision	Land Area (km ²)	2006		2001		1996		Percent Change 1996- 2006
		Total Population	Population Density (per km ²)	Total Population	Population Density (per km ²)	Total Population	Population Density (per km ²)	
Division No. 10, Subd. A	3,755.14	69	0.0	64	0.0	83	0.0	-16.87%
L'Anse-au-Loup	3.48	593	170.5	635	182.6	645	185.5	-8.06%
Red Bay	1.58	227	143.4	264	166.8	280	176.9	-18.93%
L'Anse-au-Clair	61.92	226	3.7	241	3.9	260	4.2	-13.08%
Forteau	7.44	448	60.2	477	64.1	495	66.5	-9.49%
West St. Modeste	7.78	140	18.0	175	22.5	170	21.8	-17.65%
Pinware	4.37	114	26.1	140	32.0	144	33.0	-20.83%
Total Coastal Area	3,841.71	1,817	0.5	1,996	0.5	2,077	0.5	-12.52%
Total WNSL Region	19,591.15	63,771	3.26	65,737	3.36	72,444	3.70	-11.97%
Newfoundland and Labrador	370,494.89	505,469	1.36	512,930	1.38	551,792	1.49	-8.40%
Canada	9,017,698.92	31,612,897	3.51	30,007,094	3.33	28,846,761	3.20	9.59%

Note: WNSL=western Newfoundland and southern Labrador.

Source: Statistics Canada, Census 2001 - 2006.

Appendix A-5. Aboriginal population for coastal areas, 1996 – 2001.

Coastal Area	2001					1996				
	Total	North American Indian	Métis	Inuit	Multiple Aboriginal	Total	North American Indian	Métis	Inuit	Multiple Aboriginal
Bay St. George/Port au Port	2,175	1,475	170	20	0	805	515	0	0	10
Bay of Islands	1,375	945	55	55	10	880	530	110	35	15
Great Northern Peninsula	560	315	70	75	0	405	125	155	25	10
Southern Labrador	150	0	130	20	0	135	0	130	10	0
Total Region	4,260	2,735	425	170	10	2,225	1,170	395	70	35
% of Newfoundland and Labrador Population	22.69	38.85	7.76	3.73	5.26	15.67	26.87	8.67	1.70	20.00
Newfoundland and Labrador	18,775	7,040	5,480	4,555	190	14,200	4,355	4,555	4,125	175
Canada	976,310	608,855	292,305	45,075	6,665	799,010	529,035	204,120	40,225	6,415

Source: Community Information Database 2008.

Appendix A-6. Population age structure for coastal areas, 1996 – 2006.

Coastal Area		2006				2001				1996			
		Population				Population				Population			
		Total	0-14 yrs	15-64 yrs	65+ yrs	Total	0-14 yrs	15-64 yrs	65+ yrs	Total	0-14 yrs	15-64 yrs	65+ yrs
Bay St. George/Port au Port	# (000's)	19.2	3.0	13.1	3.1	20.4	3.9	13.9	2.6	22.6	5.0	15.4	2.3
	%	100.0	15.5	68.3	16.1	100.0	19.2	67.9	12.9	100.0	22.1	67.9	10.0
Bay of Islands	# (000's)	28.9	4.4	19.9	4.6	28.2	4.9	19.3	4.0	30.4	5.7	21.4	3.4
	%	100.0	15.3	68.9	15.8	100.0	17.5	68.2	14.3	100.0	18.6	70.4	11.0
Great Northern Peninsula	# (000's)	11.8	1.6	8.4	1.8	13.2	2.2	9.3	1.7	14.4	2.9	10.2	1.4
	%	100.0	13.4	71.2	15.3	100.0	16.9	70.4	12.7	100.0	19.9	70.6	9.6
Southern Labrador	# (000's)	1.8	0.3	1.2	0.3	1.9	0.4	1.4	0.2	1.7	0.4	1.2	0.1
	%	100.0	16.3	68.9	15.1	100.0	19.0	70.7	10.4	100.0	21.1	70.5	8.3
Total Region	# (000's)	61.7	9.3	42.6	9.7	63.8	11.5	43.8	8.5	69.1	13.9	48.1	7.1
	%	100.0	15.0	69.2	15.8	100.0	18.0	68.7	13.4	100.0	20.1	69.6	10.3
Newfoundland and Labrador	# (000's)	505	78	357	70	513	94	356	63	547	110	382	55
	%	100.0	15.5	70.6	13.9	100.0	18.3	69.4	12.3	100.0	20.1	69.9	10.1
Canada	# (000's)	31,613	5,580	21,698	4,335	30,007	6,106	20,013	3,889	28,528	5,899	19,349	3,280
	%	100.0	17.7	68.6	13.7	100.0	20.3	66.7	13.0	100.0	20.7	67.8	11.5

Source: Statistics Canada, Census 2001 - 2006.

Appendix A-7. Family structure for coastal areas, 1996 – 2001.

Coastal Area	Number of Persons 2001					Number of Persons 1996				
	Never Married (single)	Legally Married (not separated)	Legally Married And separated	Divorced	Widowed	Never Married (single)	Legally Married (not separated)	Legally Married And separated	Divorced	Widowed
Bay St. George/Port au Port	5,565	8,235	460	1,235	1,210	6,130	8,860	500	1,140	1,015
Bay of Islands	6,780	13,315	475	1,385	1,680	7,550	14,110	430	1,225	1,455
Great Northern Peninsula	3,650	6,210	145	355	795	4,065	6,380	140	265	720
Southern Labrador	450	960	10	25	90	415	805	20	0	90
Total Region	16,445	28,720	1,090	3,000	3,775	18,160	30,155	1,090	2,630	3,280
Newfoundland and Labrador	131,650	235,015	8,485	20,310	28,700	141,355	245,370	7,770	17,565	25,290
Canada	8,010,725	11,959,155	722,840	1,833,130	1,375,510	7,285,005	11,694,070	685,985	1,637,520	1,326,340

Source: Community Information Database 2008.

Appendix A-8. Household structure for coastal areas, 1996 – 2001.

Coastal Area	2001					1996				
	Total Population In Private households	Number Of Private households	Number Of Persons In one-family households	Number Of Persons In multiple-family households	Number Of Persons In non-family households	Total Population In Private households	Number Of Private households	Number Of Persons In one-family households	Number Of Persons In multiple-family households	Number Of Persons In non-family households
Bay St. George/Port au Port	20,240	7,855	5,900	150	1,790	22,520	7,870	6,285	110	1,485
Bay of Islands	27,695	10,735	8,200	200	2,315	30,350	10,640	8,580	155	1,905
Great Northern Peninsula	12,620	4,740	3,810	185	725	14,345	4,665	3,935	110	570
Southern Labrador	1,350	650	560	0	60	1,685	505	440	25	45
Total Region	61,905	23,980	18,470	535	4,890	68,900	23,680	19,240	400	4,005
Newfoundland and Labrador	505,960	189,040	146,630	3,835	38,575	544,610	185,500	149,880	2,910	32,710
Canada	29,105,705	11,562,975	7,951,965	203,600	3,407,415	28,011,355	10,820,050	7,540,625	144,850	3,134,580

Source: Community Information Database 2008.

Appendix A-9. Population gender structure for coastal areas, 1996 – 2006.

GEOGRAPHY		2006			2001			1996		
		Total Population	Male Population	Female Population	Total Population	Male Population	Female Population	Total Population	Male Population	Female Population
Bay St. George/Port au Port	#	19,235	9,410	9,810	20,388	9,935	10,445	22,600	11,175	11,445
	%	100%	49%	51%	100%	49%	51%	100%	49%	51%
Bay of Islands	#	28,520	13,635	14,865	28,238	13,580	14,680	30,420	14,940	15,680
	%	100%	48%	52%	100%	48%	52%	100%	49%	52%
Great Northern Peninsula	#	11,990	5,895	6,065	13,294	6,655	6,645	15,030	7,680	7,385
	%	100%	49%	51%	100%	50%	50%	100%	51%	49%
Southern Labrador	#	1,750	890	860	1,932	985	945	1,975	1,035	950
	%	100%	51%	49%	100%	51%	49%	100%	52%	48%
Total Region	#	61,495	29,830	31,600	63,852	31,155	32,715	70,025	34,830	35,460
	%	100%	49%	51%	100%	49%	51%	101%	50%	51%
Newfoundland and Labrador	#	505,470	245,730	259,740	512,930	250,965	261,965	547,160	270,820	276,335
	%	100%	49%	51%	100%	49%	51%	100%	49%	51%
Canada	#	31,612,895	15,475,970	16,136,925	30,007,094	14,564,275	15,074,755	28,528,125	14,046,880	14,481,245
	%	100%	49%	51%	100%	49%	50%	100%	49%	51%

Source: Statistics Canada, Census 2001 - 2006.

Appendix A-10. Highest level of education for coastal areas, 1996 – 2001.

Highest Level of Education		Bay St. George/Port au Port		Bay of Islands		Great Northern Peninsula		Southern Labrador		Total Study Area		Newfoundland And Labrador		Canada	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
2001	Less than grade 9	3040	20.5	3195	15.0	2925	29.2	315	22.6	9518	20.0	63050	16.6	2284305	10.5
	Grade 9 - 13	4995	33.7	6710	31.6	3685	36.8	535	38.4	15992	33.6	121700	32.1	6848475	31.3
	Trades certificate or diploma or Other Non-University Education	5005	33.8	7805	36.8	2510	25.1	445	31.9	15828	33.2	130480	34.4	7501220	34.3
	University without degree	740	5.0	1370	6.5	415	4.1	25	1.8	2560	5.4	24510	6.5	1537800	7.0
	University with bachelor's degree or higher	1030	7.0	2155	10.1	480	4.8	75	5.4	3754	7.9	39925	10.5	3685210	16.9
1996	Less than grade 9	3735	21.2	4030	16.3	3345	29.0	325	24.3	11476	20.7	76470	17.5	2727210	12.1
	Grade 9 - 13	7145	40.5	9490	38.4	4825	41.9	455	34.1	21989	39.7	165105	37.8	8379380	37.0
	Trades certificate or diploma or Other Non-University Education	4455	25.3	6630	26.8	2050	17.8	340	25.5	13517	24.4	113605	26.0	6324665	27.9
	University without degree	1365	7.7	2760	11.2	735	6.4	135	10.1	5010	9.0	46645	10.7	2196885	9.7
	University with bachelor's degree or higher	930	5.3	1835	7.4	565	4.9	80	6.0	3421	6.2	35515	8.1	3000785	13.3

Source: Community Information Database 2008.

Appendix A-11. Industry by employment for coastal areas, 1996 – 2001.

Industry		Bay St. George/Port au Port		Bay of Islands		Great Northern Peninsula		Southern Labrador		Total Study Area		Newfoundland And Labrador		Canada	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
2001	All occupations	7,120	100	12,865	100	6,200	100	900	100	27,385	100	232,265	100	15,576,560	100
	Management	420	6	1,105	9	390	6	80	9	2,016	7	19,025	8	1,620,905	10
	Business, finance and administrative	800	11	1,845	14	505	8	90	10	3,274	12	32,560	14	2,768,375	18
	Natural and applied sciences and related	235	3	540	4	195	3	25	3	1,006	4	11,950	5	1,003,815	6
	Health	360	5	1,135	9	175	3	30	3	1,717	6	13,680	6	812,200	5
	Occupations in social science, education, government service and religion	645	9	950	7	300	5	30	3	1,946	7	17,920	8	1,205,180	8
	Occupations in art, culture, recreation and sport	125	2	200	2	55	1	30	3	414	2	4,610	2	435,680	3
	Sales and service	2,245	32	3,710	29	1,385	22	185	21	7,608	28	59,355	26	3,677,380	24
	Trades, transport and equipment operators and related occupations	1,220	17	2,065	16	1,155	19	195	22	4,687	17	39,955	17	2,294,620	15
	Occupations unique to primary industry	730	10	530	4	1,405	23	170	19	2,872	10	18,100	8	667,550	4
	Occupations unique to processing, manufacturing and utilities	360	5	825	6	715	12	110	12	2,033	7	15,105	7	1,090,860	7
1996	All occupations	7,825	100	13,395	100	5,965	100	780	100	28,265	100	229,245	100	14,317,545	100
	Management	475	6	920	7	255	4	60	8	1,727	6	16,465	7	1,289,125	9
	Business, finance and administrative	915	12	1,945	15	460	8	70	9	3,424	12	34,000	15	2,718,255	19
	Natural and applied sciences and related	205	3	360	3	155	3	45	6	773	3	9,650	4	712,500	5
	Health	360	5	870	6	170	3	45	6	1,459	5	12,425	5	719,455	5
	Occupations in social science, education, government service and religion	740	9	995	7	380	6	100	13	2,238	8	18,425	8	975,385	7
	Occupations in art, culture, recreation and sport	140	2	265	2	60	1	20	3	490	2	4,315	2	386,315	3
	Sales and service	2,025	26	4,100	31	1,480	25	170	22	7,856	28	63,200	28	3,724,435	26
	Trades, transport and equipment operators and related occupations	1,625	21	2,315	17	875	15	145	19	5,013	18	39,475	17	2,018,355	14
	Occupations unique to primary industry	895	11	495	4	1,650	28	80	10	3,163	11	16,655	7	680,685	5
	Occupations unique to processing, manufacturing and utilities	470	6	1,095	8	480	8	90	12	2,157	8	14,640	6	1,093,045	8

Source: Community Information Database 2008.

Appendix A-12. Major field of education for coastal areas, 1996 – 2001.

Major Field of Education Population 15 years and over		Bay St. George/Port au Port		Bay of Islands		Great Northern Peninsula		Southern Labrador		Total Study Area		Newfoundland and Labrador		Canada	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
2001	Population with postsecondary qualifications	5,845		9,500		2,955		410		18,710		163,485		10,466,370	
	Educational, recreational & counselling services	810	14	935	10	380	13	45	11	2,207	12	19,820	12	1,083,695	10
	Fine & applied arts	295	5	335	4	180	6	25	6	850	5	6,750	4	576,915	6
	Humanities & related fields	135	2	340	4	75	3	20	5	578	3	5,610	3	674,560	6
	Social sciences & related fields	405	7	540	6	160	5	10	2	1,133	6	9,440	6	1,038,220	10
	Commerce, management and business administration	1,270	22	2,250	24	695	24	75	18	4,359	23	39,430	24	2,287,215	22
	Agricultural and biological sciences/technologies	235	4	350	4	145	5	20	5	763	4	7,015	4	497,505	5
	Engineering & applied sciences	80	1	250	3	10	0	0	0	344	2	3,225	2	489,665	5
	Engineering and applied science technologies and trades	2,075	36	2,800	29	1,010	34	200	49	6,184	33	49,620	30	2,234,145	21
	Health professions, sciences & technologies	495	8	1,505	16	270	9	15	4	2,318	13	18,905	12	1,164,100	11
	Mathematics and physical sciences	35	1	175	2	30	1	0	0	243	1	3,415	2	394,510	4
	No specialization and all other, n.e.c.	10	0	20	0	0	0	0	0	30	0	255	0	25,840	0
1996	Population with postsecondary qualifications	5,465		8,975		2,720		480		17,640		155,330		9,080,105	
	Educational, recreational & counselling services	675	12	995	11	415	15	90	19	2,214	13	18,850	12	960,160	11
	Fine & applied arts	175	3	400	4	120	4	20	4	727	4	6,130	4	509,715	6
	Humanities & related fields	100	2	335	4	95	3	20	4	559	3	5,645	4	572,110	6
	Social sciences & related fields	355	6	520	6	165	6	10	2	1,068	6	8,840	6	870,405	10
	Commerce, management and business administration	1,265	23	2,100	23	430	16	65	14	3,922	22	38,355	25	2,015,070	22
	Agricultural and biological sciences/technologies	240	4	240	3	145	5	0	0	637	4	6,330	4	428,230	5
	Engineering & applied sciences	15	0	155	2	25	1	35	7	233	1	2,980	2	373,625	4
	Engineering and applied science technologies and trades	2,030	37	2,840	32	1,025	38	180	38	6,181	35	47,110	30	1,999,720	22
	Health professions, sciences & technologies	405	7	1,270	14	215	8	50	10	1,969	11	17,685	11	1,027,060	11
	Mathematics and physical sciences	125	2	135	2	50	2	10	2	326	2	3,270	2	306,855	3
	No specialization and all other, n.e.c.	0	0	15	0	0	0	10	2	25	0	125	0	17,125	0

Source: Community Information Database 2008.

Appendix B-1. Cruise schedule 2008.

Ship	Cruiseline	Date	Max Passengers	Max Crew	Estimated Value
Bay St. George/Port au Port					
CODROY					
Polar Star	Polar Star Expeditions	3-Oct-08	44	105	2,491
Akademik Ioffe	Adventure Canada	11-Oct-08	50	110	2,656
Bay of Islands					
CORNER BROOK					
Maasdam	Holland America	8-Jul-08	557	1266	91,320
Caledonia	Canadian Sailing Expeditions	29-30 Jul-08		154	8,741
Caledonia	Canadian Sailing Expeditions	2-3 Aug-08		154	8,741
Caledonia	Canadian Sailing Expeditions	9-10 Aug-08		154	8,741
Vistamar	Plantours-partner	13-Aug-08	100	328	22,111
Caledonia	Canadian Sailing Expeditions	16-17 Aug-08		154	8,741
Caledonia	Canadian Sailing Expeditions	23-24 Aug-08		154	8,741
Caledonia	Canadian Sailing Expeditions	30-31 Aug-08		154	8,741
Royal Princess	Princess Cruises	12-Sep-08	373	710	53,332
National Geographic Explorer	Lindblad Expeditions	19-Sep-08		296	16,801
Crystal Symphony	Crystal Cruise Line	1-Oct-08	545	940	72,397
Eurodam	Holland America	4-Oct-08	800	2044	143,969
LARK HARBOUR					
Caledonia	Canadian Sailing Expeditions	4-5 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	11-12 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	18-19 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	25-26 Aug-08		77	1,455
MAN O WAR COVE					
Caledonia	Canadian Sailing Expeditions	6-7-Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	13-14 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	20-21 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	27-28 Aug-08		77	1,455
COX'S COVE					
Caledonia	Canadian Sailing Expeditions	8-9 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	15-16 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	22-23 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	29-30 Aug-08		77	1,455
Akademik Ioffe	Adventure Canada	10-Oct-08	50	110	2,656
Great Northern Peninsula					
NORRIS POINT					
Bremen	Hapag Lloyd	6-Jun-08	100	164	4,253
Caledonia	Canadian Sailing Expeditions	27-28 Jul-08		77	1,455
Caledonia	Canadian Sailing Expeditions	5-6 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	12-13 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	19-20 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	26-27 Aug-08		77	1,455
WOODY POINT					

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Ship	Cruiseline	Date	Max Passengers	Max Crew	Estimated Value
Caledonia	Canadian Sailing Expeditions	7-8 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	14-15 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	21-22 Aug-08		77	1,455
Caledonia	Canadian Sailing Expeditions	28-29 Aug-08		77	1,455
National Geographic Explorer	Lindblad Expeditions	18-Sep-08		148	2,797
Polar Star	Polar Star Expeditions	2-Oct-08	44	105	2,492
Akademik Ioffe	Adventure Canada	9-Oct-08	50	110	2,656
L'ANSE AUX MEADOWS					
Bremen	Hapag Lloyd	6-Jun-08	100	164	4,253
Lyubov Orlova	Cruise North Expeditions	23-Jun-08	63	122	3,032
Akademik Ioffe	Quark Expeditions	11-Jul-08	50	110	2,656
Prince Albert II	SilverSea	13-Aug-08	80	132	3,417
Prince Albert II	SilverSea	16-Aug-08	80	132	3,417
National Geographic Explorer	Lindblad Expeditions	17-Sep-08		148	2,797
Polar Star	Polar Star Expeditions	26-Sep-08	44	105	2,492
Polar Star	Polar Star Expeditions	30-Sep-08	44	105	2,492
Orlova	Adventure Canada	2-Oct-08	63	122	3,032
Akademik Ioffe	Adventure Canada	7-Oct-08	50	110	2,656
RALEIGH					
Akademik Ioffe	Adventure Canada	7-Oct-08	50	110	2,656
PLUM POINT/BIRD COVE					
Akademik Ioffe	Adventure Canada	8-Oct-08	50	110	2,656
GROS MORNE NATIONAL PARK					
Prince Albert II	SilverSea	17-Aug-08	80	132	3,417
Southern Labrador					
CAPE ST. CHARLES					
Orlova	Adventure Canada	1-Oct-08	63	122	3,032
RED BAY					
Bremen	Hapag Lloyd	15-17-Jun-08	100	164	4,253
Lyubov Orlova	Cruise North Expeditions	24-Jun-07	63	122	3,032
Polar Star	Polar Star Expeditions	1-Oct-08	44	105	2,492
Totals			3,737	11,092	554,718

Note: Actual port calls can differ from cruise schedule.

Source: Cruise Association of Newfoundland and Labrador 2008.

Appendix B-2. Cruise ships schedule for the Port of Corner Brook, 2003 – 2009.

Cruise Line	Ship	Date	Time Berth	# of Passengers/Crew	
2009					
Holland America	Eurodam	September 30	0800 - 1600	2,044	800
Princess	Crown Princess	September 30	8:00 - 17:00	3,080	1200
Fred Olsen	Balmoral	October 5	8:00 - 16:00	1,072	741
Princess	Crown Princess	October 6	8:00 - 17:00	3,080	1200
Peter Deilmann	Deutschland	October 16 - 17	19:00 - 17:00	446	254
Princess	Crown Princess	October 20	8:00 - 17:00	3,080	1200
Princess	Crown Princess	October 26	8:00 - 17:00	3,080	1200
2008					
Holland Amer.	Maasdam	July 08	8:00 - 17:00	1,160	557
Canadian Sailing Expeditions	Caledonia	July 20 - 29		110	
Canadian Sailing Expeditions	Caledonia	July 30 – August 2		110	
Canadian Sailing Expeditions	Caledonia	Aug 3 - 9		110	
Canadian Sailing Expeditions	Caledonia	Aug 10 - 16		110	
Canadian Sailing Expeditions	Caledonia	Aug 17 - 23		110	
Canadian Sailing Expeditions	Caledonia	Aug 24 - 30		110	
Canadian Sailing Expeditions	Caledonia	Aug 31 - Sept 6		110	
Princess	Royal Princess	September 12	9:00 - 16:00	3,100	1250
Crystal Cruise Lines	Crystal Symphony	October 01	0900 - 1800	940	545
Holland America	Eurodam	October 04	0700 - 1600	2,044	800
2007					
Holland Amer.	Maasdam	August 8	7:40 - 18:00	1,157	607
Peter Deilmann	Deutschland	August 23	6:50 - 16:50	446	254
Norwegian	Norwegian Dawn	September 10	6:55 - 18:00	2,178	1068
Hapag Lloyd	c. Columbus	September 12	10:00 - 18:00	377	172
Norwegian	Norwegian Dawn	September 20	7:10 - 18:00	2,163	1074
Princess	Grand Princess	September 25	8:45- 17:35	2,518	1115
Norwegian	Norwegian Dawn	October 1	7:15 - 18:05	2,152	1071
Norwegian	Norwegian Dawn	October 11	7:20 - 18:00	2,158	1064
Princess	Grand Princess	October 15	8:18 - 17:15	2,580	1093
Princess	Grand Princess	October 21	10:20 - 18:15	2,552	1089
Norwegian	Norwegian Dawn	October 23	7:05 - 18:05	2,181	1061
2006					
Holland America	Maasdam	August 2	8:00-18:00	1,159	609
Trans Ocean Cruises	Astor	August 14	08:00-18:00	507	273
Hapag Lloyd	C. Columbus	September 15	12:00-18:00	375	169
Cunard	Queen Mary II	October 05	8:00-18:30	2,466	1283
Cunard	Queen Mary II	October 15	8:00-18:30	2,581	1266

Cruise Line	Ship	Date	Time Berth	# of Passengers/Crew	
Princess Cruise Lines	Sea Princess	October 30	09:00-17:15	1,924	854
2005					
Holland America	Maasdam	August 17	08:00 - 18:00	1,266	
Hapag Lloyd	C. Columbus	August 27	08:00 - 18:00	400	
Silversea	Silver Whisper	September 15	08:00 - 18:00	388	
Astor	MS Blackwatch	September 17	08:00 - 17:00	902	
Silversea	Silver Whisper	September 23	08:00 - 17:00	388	
Cunard	Queen Mary 2	September 29	08:00 - 18:00	2,600	
Princess	Sea Princess	October 01	07:00 - 13:00	2,272	
Royal Caribbean	Enchantment of the Seas	October 04	12:00 - 21:00	1,950	
Princess	Sea Princess	October 07	14:00 - 19:00	2,272	
Hapag Lloyd	C. Columbus	October 18	08:00 - 16:00	400	
Princess	Sea Princess	October 21	07:00 - 13:00	2,272	
2004					
Holland America	Rotterdam	July 07	08:00 - 14:00	1,620	
Can. Sailing Exped.	Caledonia	August 06		111	
Can. Sailing Exped.	Caledonia	August 20		111	
P & O	Aurora	October 03	13:00 - 18:00	2,800	
Cunard	Queen Mary 2	October 03	08:00 - 14:00	3,850	
Celebrity Cruise	Constellation	October 15	08:00 - 14:00	3,449	
2003					
Canadian Sailings	Atlantis	July 14 - 16		50	
Canadian Sailings	Atlantis	July 21 - 23		50	
Canadian Sailings	Atlantis	September 6 - 8		50	
Silversea	Silver Whisper	September 08	08:00 - 17:00	576	
Canadian Sailings	Atlantis	September 9 - 10		50	
P & O	Orianna	September 15	08:00 - 17:00	2,570	
Norwegian Cruise	Norwegian Dream	September 25	08:00 - 17:00	2,667	
Norwegian Cruise	Norwegian Dream	October 09	08:00 - 17:00	2,667	
Norwegian Cruise	Norwegian Dream	October 15	08:00 - 17:00	2,667	

Source: Cruise Association of Newfoundland and Labrador 2008.

Appendix B-3. Cruise Association of Newfoundland and Labrador port contacts. April 2008.

Port	Contact	Phone	Fax	E-mail
Bay St. George/Port au Port				
Stephenville	Mike Tobin	709 643-2856	709 643-2770	manager@town.stephenville.nf.ca
	Port Harmon Authority	709 643-9500		
Bay of Islands				
Corner Brook	Jackie Chow	709 634-6600	709 634-6620	jchow@cornerbrookport.com
Lark Harbour	Mayor Paul Keetch	709 681-2270	709 681-2900	
Great Northern Peninsula				
Bonne Bay/Woody Point	Irene Martin	709 453-2207 709 453-2503	709 453-7269	woody.point@nf.aibn.com
Norris Point	Mayor Joseph Reid	709 458-2896	709 458-2883	info@norrispoint.ca
Northern Peninsula/ Southern Labrador	Thresa Burden, VTTA	709 454-8888	709 454-8899	tburden@vttanf.ca
Port au Choix	Millie Spence, Parks Canada	709 861-3522	709 861-3827	millie.spence@pc.gc.ca
	Kieran O'Keefe, Harbour Master	709 861-3087	709 861-3866	
Rocky Harbour	Mayor Kevin Shears	709 458-2376	709-458-2293	info@rockyharbour.ca
Southern Labrador				
Red Bay	Liz Yetman	709 920-2197	709 920-2103	redbaytowncouncil@nf.aibn.com

Source: Cruise Association of Newfoundland and Labrador 2008.

Appendix C. Harbour authority contacts.

Name/Address	Directors/Members	Title	Phone (Home)	Phone (Work)
Bay St. George/Port au Port				
Bay St. George South P.O. Box 5 McKays, NL, A0N 1G0	Denise McInnis Alphonsus Bennett Melvin Barry	President Sec. Tres.	645-2062 645-2153 645-2794	
Black Duck Brook P.O. Box 538 Port au Port East, NL, A0N 1T0	Joe Collier Reg Drake Calvin LeCours	Pres. V-Pres. Secretary/Tres.	648-2151 642-5273 642-5318	
Blue Beach P.O. Box 271 Blue Beach, NL, A0N 1R0	Brian Flynn Rosemary Benoit Jason Benoit	President Sec/Tres. v-Pres	642-5946 642-5857 642-4989	
Cape St. George 14 Rouzes Road De Grau, NL, A0N 1T1	Leon Simon Harold Rouzes Jasen Benoit	Pres V-Pres Sec/Treas.	644-2836 644-2365 643-9113	643-9113
Codroy P.O. Box 13 Codroy, NL	Chris Collier Craig Collier Jason Collier	Pres V-Pres Sec.	955-2287 955-2515 955-3201	
Fox Island River , P.O. Box 791, RR#1 Fox Island River Port au Port, NL, A0N 1T0	Augustus Hynes Jeff Leroy Joshlyn Hynes/Reid	Chairperson Vice Pres Bookkeeper	648-9374 648-2894 648-2318	
Lourdes P.O. Box 190 Lourdes, NL, A0N 1R0	James Rouzes Kevin Skinner John Benoit	Pres. V. Pres. Sec/Tres	642-5916 642-5806 642-5751	
Mainland/Three Rock Cove P.O. Box 169 Mainland, NL, A0N 1R0	Henry Rouzes David Jesso	President V-Pres	642-5011 642-5349	
Piccadilly P.O. Box 272 Port au Port, NL, A0N 1T0	Don Kendall Dennis Rowe Alex Joy	Pres. V. Pres Sec/Tres.	644-2308 644-2226 642-5701	
Port Harmon (Sub-Port) P.O. Box 656 Stephenville, NL A2N 3B5	Eric Collins Roger Lacosta Josephine Sheppard Isaac Drake John Sheppard	Pres. Secretary Treasurer H. Supervisor V. Pres	643-4712 648-2224 643-3148 643-3148	
Bay of Islands				
Cox's Cove , General Delivery Cox's Cove, NL, A0L 1C0	Tony Oxford	President	688-2718	
Frenchman's Cove P.O. Box 97 Frenchman's Cove, NL, A0L 1E0	Willis Hickey Jim McCarthy Stephanie Lowe	Pres Vice Pres Sec/Trea	789-3621 789-2208 785-1864	
Lark Harbour/Little Port P.O. Box 130 Lark Harbour, NL, A0L 1H0	Vincent Sheppard Paul Sheppard Boyd Rice	Pres. V-Pres. Sec./HM	681-2056 681-2854 681-2227	
Great Northern Peninsula				
Anchor Point General Delivery	Rendell Genge Lawrence Genge	Pres V. Pres	456-2654 456-2054	

Social, Economic, Cultural Overview: Western Newfoundland & Southern Labrador

Name/Address	Directors/Members	Title	Phone (Home)	Phone (Work)
Anchor Point, NL, AOK 1A0	Maxine Genge	Sec/Tres	456-2612	
Bartlett's Harbour PO Box 23 Bartlett's Harbour, NL, AOK 1C0	Harrison Plowman Francis Plowman Dorman Caines	Pres Sec/Tres Vice Pres	847-4119 847-5227 847-6421	
Bird Cove/Brig Bay General Delivery, Brig Bay, NL, AOK 1L0	Melvin Allingham Wayne Allingham		247-2601 247-2063	
Black Duck Cove General Delivery Black Duck Cove, NL, AOK 1M0	Jacob Dredge Scott Dredge Wilfred Toope	Pres/Tres V-Pres Sec.	877-2309 877-2400 877-2228	
Blue Cove , P.O. Box 14 Plum Point, NL, AOK 4A0	Lorenzo Taylor Albert Chambers	Pres. V-Pres	247-2308	
Cook's Harbour P.O. Box 119 Cook's Harbour, NL, AOK 1Z0	Barry Decker Len Warren Priscilla Saunders	Pres Sec. Treasurer/Hsup	249-4441 249-5421 249-5536	249-3111
Cow Head P.O. Box 33 Cow Head, NL, AOK 2A0	Garland Hutchings Vivian Hutchings Max House	Pres Bookkeeper V-Pres	243-2207 243-2207 243-2215	243-7222
Daniel's Harbour General Delivery Daniel's Harbour, NL AOK 2C0	Otto House Austin Perry Leander Brophy Michael Biggin Daniel House Otto House Sean Perry	Pres Pres H.Master	898-2427 898-2412 898-2386 898-2432 898-2245 898-2427 898-2585	898-2277
Eddies Cove East , General Delivery Eddies Cove East, NL Strait of Belle Isle, AOK 2G0	Gerald Coates Brian Coates Harrison Coates	President V-President Secretary	475-6121 475-5101 475-4521	
Flower's Cove P.O. Box 168 Flower's Cove, NL AOK 2N0	Jarvis Walsh Rex Whalen Milan Moores Michael Lavallee	Pres Sec Treas V-Pres.	456-2207 456-2709 456-2394 456-2118	
Forresters Point , General Delivery Forresters Point, NL	Roland Gibbons	Pres	877-2225	
Green Island Brook , General Delivery Green Island Brook, NL, AOK 2W0	Stewart Hughes Dwight Macey	President Sec/Tres	475-6311 475-5181	
Green Island Cove General Delivery Green Island Cove, NL, AOK 2W0	Loomis Way Calvin Mitchelmore Garrison McLean	Pres V-Pres Treasurer/Sec	475-5441 475-4531 475-3102	456-7684 (cell)
Norris Point P.O. Box 224 Norris Point, NL AOK 3V0	Bruce Jenniex John Payne Eric Reid Walter Reid	Pres. V. Pres. Treasurer Secretary	458-2647 458-2936 458-2999 458-2040	
Port au Choix P.O. Box 209 Port au Choix, NL, AOK 4C0	Robert Spence Clayton Plowman Kieran O'Keefe	Pres. V-Pres. H. Master	861-3391 861-3044 861-7466	
Port Saunders	Tony Ryan	Pres.	861-3155	

Social, Economic, Cultural Overview: Western Newfoundland & Southern Labrador

Name/Address	Directors/Members	Title	Phone (Home)	Phone (Work)
P.O. Box 173 Port Saunders, NL A0K 4H0	Maurice Ryan Wayne Finlay Mark Lowe	H. Master Vice Pres Sec/Treas	861-7406 (cell) 861-2272 861-3313	861-2137
Raleigh P.O. Box 103 Raleigh, NL, A0K 4J0	Roger Taylor Harvey Taylor Sharron Taylor	V-President President Sec/Treas	452-5211 452-3251 452-2016	
River of Ponds General Delivery River of Ponds, NL, A0K 4M0	Leon Patey Holly Patey Jordon Patey	President Sec/Treas Chairperson	225-3103 225-3105 225-3105	
Rocky Harbour P.O. Box 394 Rocky Harbour, NL, A0K 4N0	Cathy Butt Stanley Butt Anthony Butt	Pres. V-Pres. Sec/Tres.	458-3074 458-2501 458-3074	
Sally's Cove General Delivery Sally's Cove, NL, A0K 4Z0	Clarence Roberts Inez Roberts	Pres. Sec/Tres	243-2583 458-2480	
Sandy Cove P.O. Box 84, Sandy Cove Strait of Belle Isle, NL, A0K 5C0	Harrison White Thomas White	Pres. Secretary	456-2295	
Savage Cove General Delivery Savage Cove, NL A0K 5C0	Derek Coles Garfield Way Olive Way Cicely Way	Pres. Vice Pres Secretary Treasurer	456-2452 456-2329 456-2758 456-2738	
St. John Bay General Delivery Eddies Cove West, NL A0K 2H0	Wayne Offreye Baxter Chambers Jacinta Offrey June Offrey John Galliot	President V. President Secretary Secretary Treasurer	861-2297 247-2719 861-3058 861-3089 861-3333	
Shoal Cove West Reefs Harb. P.O. Box 32 Reefs Harbour, NL A0K 4L0	Oswan Tucker Gideon Applin Wilfred Coombs Clarence Ryland	President V-President Secretary Treasurer	847-6301 847-6104 847-6321 847-6521	
Straitsview P.O. Box 146 Noddy Bay, NL, A0K 2X0	Roland Hedderson Dennis Hedderson Christine Hedderson	Pres. Vice Pres Sec/Tres	623-2545 623-2650 623-2151	
Trout River General Delivery, Trout River, NL A0K 5P0	William Crocker Marsha Crocker	Pres Sec/Tres	451-3271 451-3113	
Woody Point , P.O. Box 37 Woody Point, NL, A0K 1P0	Todd Roberts Collene Howell	Pres Sec./Tres.	453-2578 453-7241	
Southern Labrador				
Forteau P.O. Box 35 Forteau, NL, A0K 2P0	Frank Flynn Gale Flynn Craig Flynn	Pres. Sec/Tres V-Pres.	931-2201 931-2201 931-2011	931-2241
L'Anse au Clair P.O. Box 103 Labrador, NL, A0K 3K0	Kelvin Letto Lester Letto Clyde Thomas	President V-Pres Tres	931-2081 931-2034 931-2102	
L'Anse au Loup , P.O. Box 198	Marcell O'Brien	Pres.	927-5859	

Social, Economic, Cultural Overview: Western Newfoundland & Southern Labrador

Name/Address	Directors/Members	Title	Phone (Home)	Phone (Work)
L'Anse au Loup Labrador, NL, A0K 3L0	Darrell O'Brien Eric O'Brien	V-Pres. Sec/Tres	927-5769 927-5685	

Source: Fisheries and Oceans Canada 2008.

Appendix D. ACOA Assistance to project by coastal areas, 2003 – 2007.

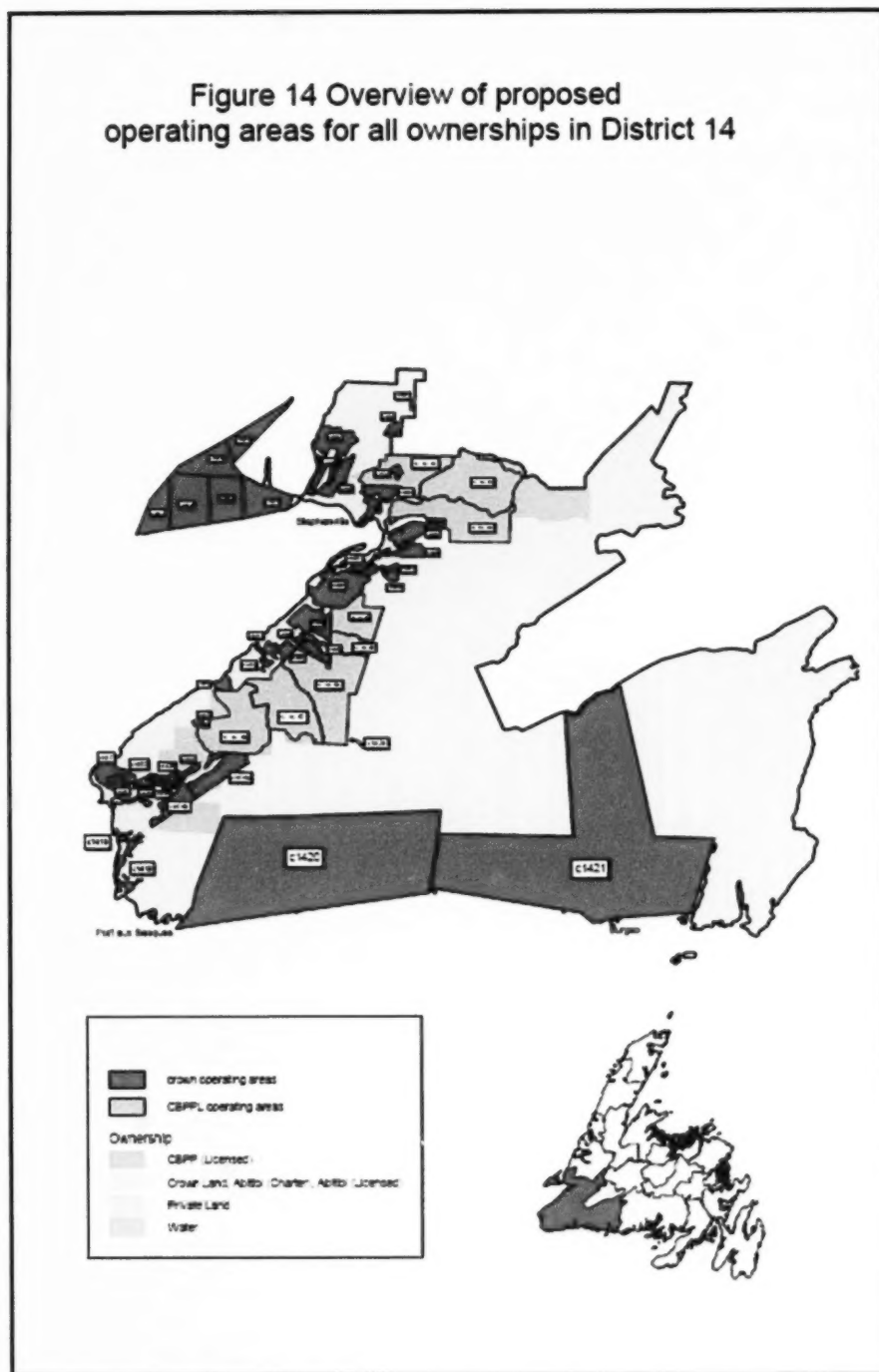
Coastal Area	Year	Amount	Contributions	Grants	Repayable Contributions	Provisionally Repayable Contrib.
Bay St. George/Port au Port	2003	ACOA Assistance	2,009,421	6,985	650,500	\$63,600
		Total Cost of Projects	4,601,993	9,313	1,821,000	\$84,800
	2004	ACOA Assistance	980,220	12,000	1,460,961	\$196,327
		Total Cost of Projects	1,395,308	29,847	5,046,292	\$261,769
	2005	ACOA Assistance	574,837	2,500	0	0
		Total Cost of Projects	793,742	6,000	0	0
	2006	ACOA Assistance	577,036	4,500	688,853	0
		Total Cost of Projects	937,349	6,000	1,355,470	0
	2007	ACOA Assistance	778,549	28,870	0	0
		Total Cost of Projects	1,619,221	38,493	0	0
Bay of Islands	2003	ACOA Assistance	1,945,792	0	301,349	0
		Total Cost of Projects	3,160,444	0	666,912	0
	2004	ACOA Assistance	2,705,020	28,360	78,165	0
		Total Cost of Projects	4,975,676	199,575	219,681	0
	2005	ACOA Assistance	1,012,845	0	1,006,750	0
		Total Cost of Projects	2,433,707	0	2,436,492	0
	2006	ACOA Assistance	1,189,344	33,900	326,507	0
		Total Cost of Projects	2,965,056	308,350	688,013	0
	2007	ACOA Assistance	1,475,264	3,000	300,000	\$2,779,999
		Total Cost of Projects	5,698,636	8,000	2,080,000	\$4,500,000
Great Northern Peninsula	2003	ACOA Assistance	10,519,597	21,188	1,029,711	0
		Total Cost of Projects	15,998,438	91,390	2,136,994	0
	2004	ACOA Assistance	7,874,045	6,820	437,032	0
		Total Cost of Projects	11,340,180	59,735	1,375,887	0
	2005	ACOA Assistance	1,691,036	7,275	713,895	0
		Total Cost of Projects	2,718,805	25,789	1,511,500	0
	2006	ACOA Assistance	1,102,584	10,200	1,681,000	0
		Total Cost of Projects	2,533,251	51,053	4,521,254	0
	2007	ACOA Assistance	1,853,867	0	0	0
		Total Cost of Projects	4,116,551	0	0	0
Southern Labrador	2003	ACOA Assistance	1,974,565	8,000	82,000	0
		Total Cost of Projects	2,419,908	22,000	387,570	0
	2004	ACOA Assistance	1,999,024	20,213	13,658	0
		Total Cost of Projects	6,589,386	45,950	27,316	0
	2005	ACOA Assistance	653,336	8,827	0	0
		Total Cost of Projects	797,261	33,508	0	0
	2006	ACOA Assistance	160,933	12,400	96,500	0
		Total Cost of Projects	319,243	59,181	188,000	0
	2007	ACOA Assistance	40,000	35,000	621,113	0
		Total Cost of Projects	133,590	170,129	1,784,786	0
Total Region	2003	ACOA Assistance	16,449,375	36,173	2,063,560	63,600
		Total Cost of Projects	26,180,783	122,703	5,012,476	84,800
	2004	ACOA Assistance	13,558,309	67,393	1,989,816	196,327
		Total Cost of Projects	24,300,550	335,107	6,669,176	261,769
	2005	ACOA Assistance	3,932,054	18,602	1,720,645	0
		Total Cost of Projects	6,743,515	65,297	3,947,992	0
	2006	ACOA Assistance	3,029,897	61,000	2,792,860	0
		Total Cost of Projects	6,754,899	424,584	6,752,737	0
	2007	ACOA Assistance	4,147,680	66,870	921,113	2,779,999
		Total Cost of Projects	11,567,998	216,622	3,864,786	4,500,000

Notes: Repayable Contribution - a loan that is fully repayable, regardless of project outcomes. Generally, these loans are non-interest bearing and unsecured; Provisionally Repayable Contribution - a contribution where the obligation to repay (partially or fully) is contingent upon certain conditions or milestones being met; Grant - an unconditional transfer payment to an individual or organization that meets certain eligibility requirements; Contribution - a conditional transfer payment to an individual or organization to reimburse specific expenditures. The contribution agreement is subject to an audit.

Source: ACOA Project Information Site.

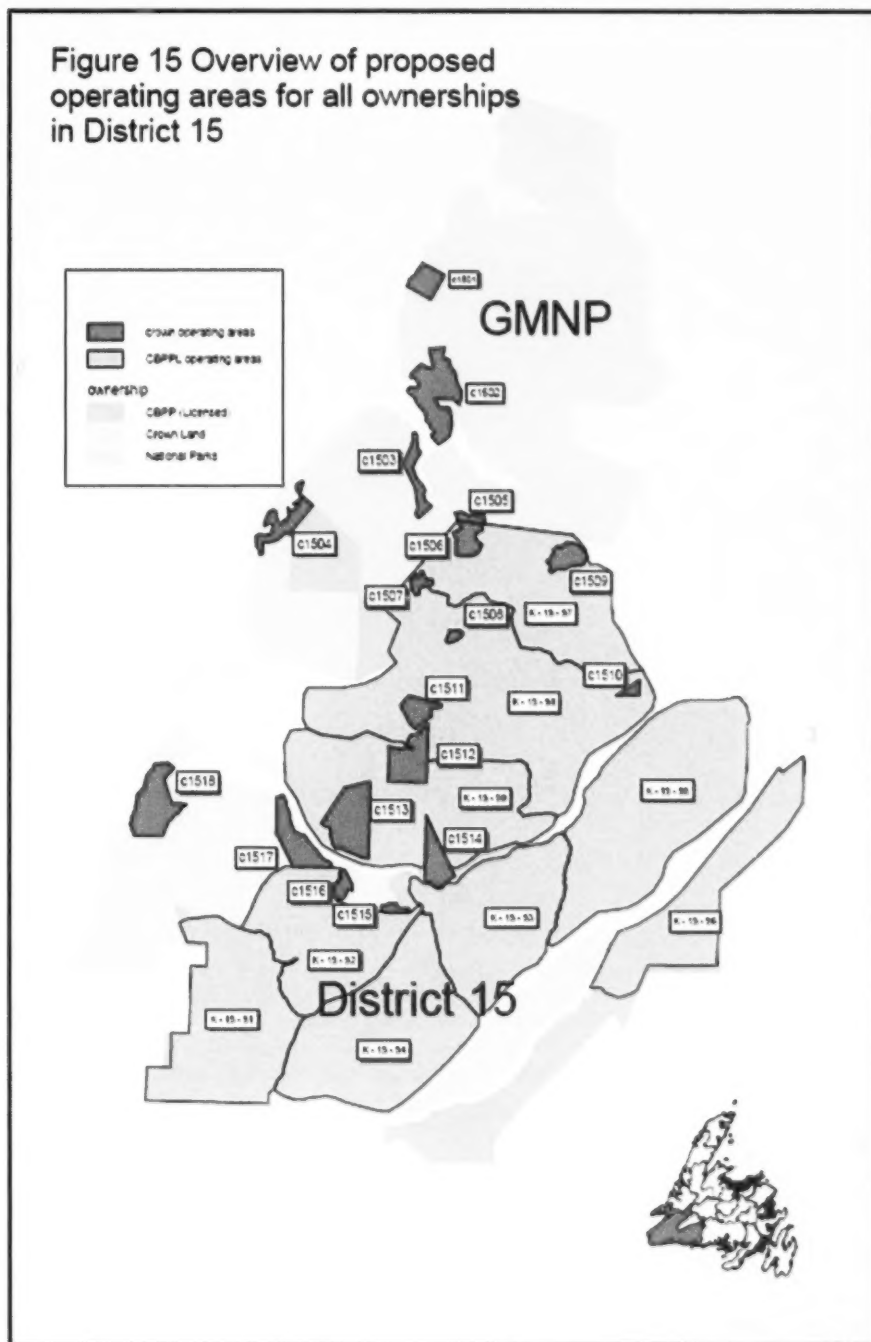
Appendix E-1: Overview map of Forestry Management District 14.

Figure 14 Overview of proposed operating areas for all ownerships in District 14



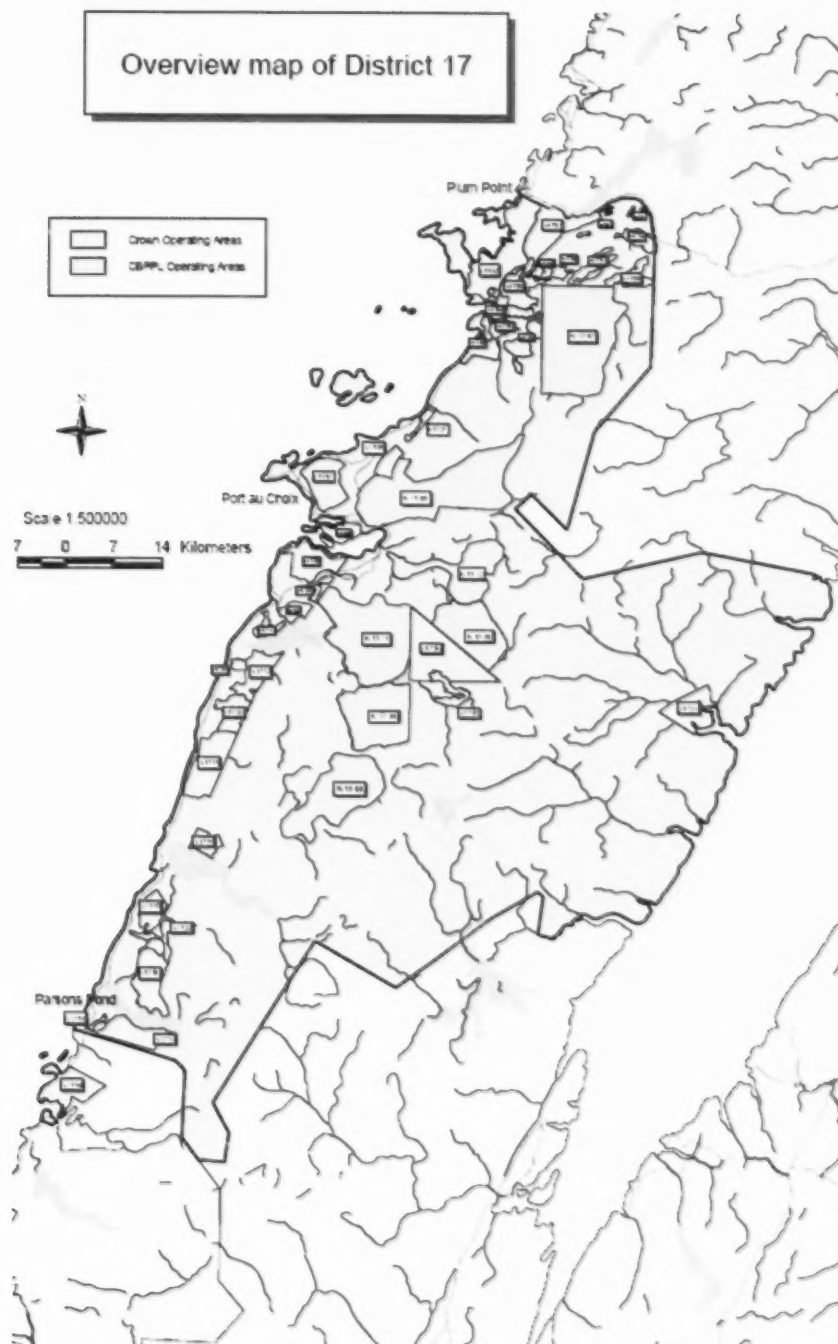
Source: Department of Natural Resources, Forestry Services Branch 2009.

Appendix E-2: Overview map of Forestry Management District 15.



Source: Department of Natural Resources, Forestry Services Branch 2009.

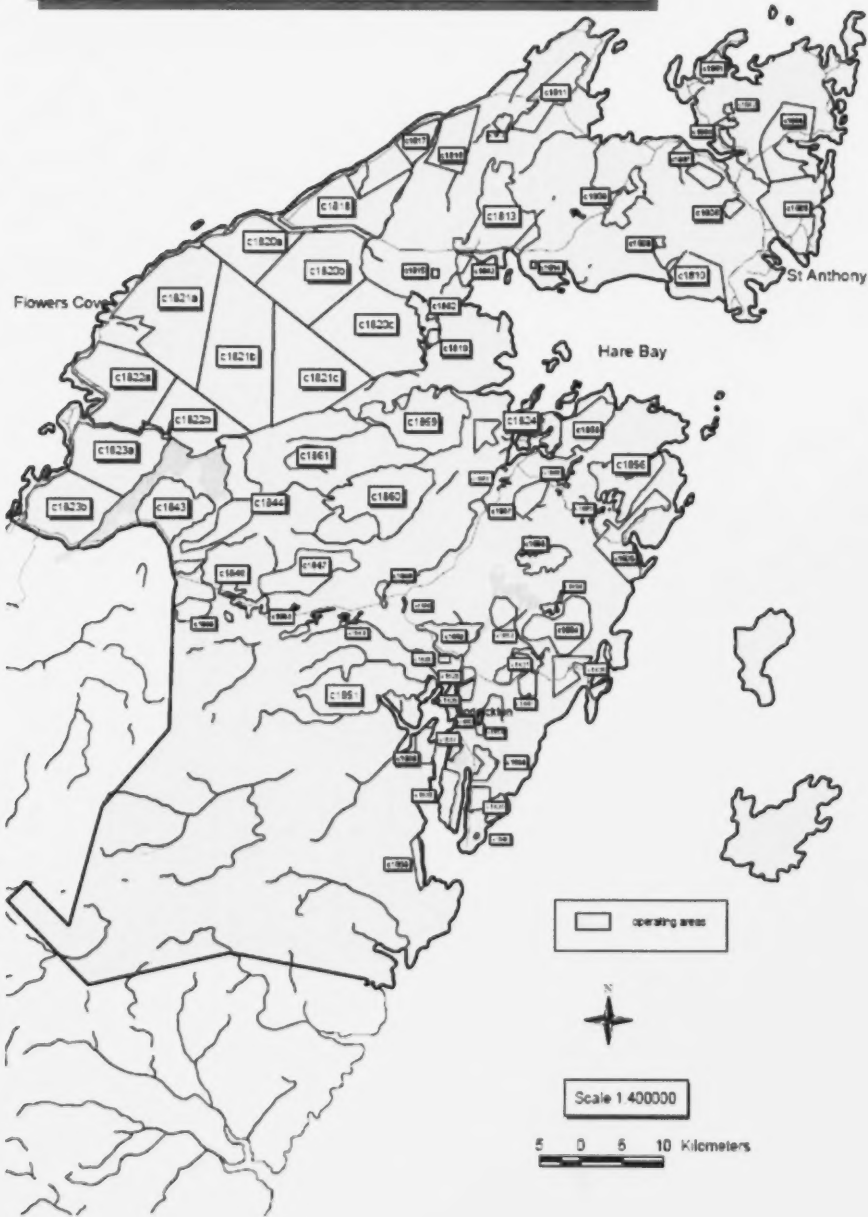
Appendix E-3: Overview map of Forestry Management District 17.



Source: Department of Natural Resources, Forestry Services Branch 2009.

Appendix E-4: Overview map of Forestry Management District 18.

Overview map of District 18



Source: Department of Natural Resources, Forestry Services Branch 2009.

Appendix E-5: Overview map of Forestry Management District 21.

Source: Department of Natural Resources, Forestry Services Branch 2009.



Appendix F. Salmon catch data by Salmon Management Areas, 1996-2007.

Year	Retained	Released	Total
13 (Includes Bay St. George/Port au Port & Bay of Islands)			
2007	4,057	5,277	9,334
2006	6,079	11,869	17,948
2005	6,539	10,445	16,984
2004	5,456	8,141	13,597
2003	4,872	6,835	11,707
2002	5,565	5,613	11,178
2001	5,853	7,151	13,004
2000	5,592	9,526	15,118
1999	3,333	5,448	8,781
1998	3,023	6,772	9,795
1997	4,958	11,914	16,872
1996	6,562	12,379	18,941
14A (Great Northern Peninsula)			
2007	2,318	2,429	4,747
2006	3,263	3,418	6,681
2005	3,338	3,955	7,293
2004	3,667	3,333	7,000
2003	3,917	3,615	7,532
2002	4,406	4,490	8,896
2001	3,162	3,271	6,433
2000	4,179	3,892	8,071
1999	3,928	4,502	8,430
1998	3,568	4,803	8,371
1997	4,609	3,246	7,855
1996	5,861	3,745	9,606
14B (Southern Labrador)			
2007	489	1,460	1,949
2006	509	1,782	2,291
2005	438	2,327	2,765
2004	464	1,219	1,683
2003	664	1,420	2,084
2002	614	1,981	2,595
2001	546	1,422	1,968
2000	718	2,878	3,596
1999	397	1,163	1,560
1998	864	1,460	2,324
1997	730	1,179	1,909
1996	974	1,271	2,245

Source: DFO 2009.



